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**Impact study on Agricultural Extension Services to Farmers by Agri.-Clinics
and Agri.-Business Centres (ACABCs) Scheme in Uttar Pradesh**

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PREFACE

In order to strengthen the agricultural extension services being provided to the teeming farmers by the scanty incapable extension workers as well as to tap the potential of huge unemployed agricultural graduates and to provide them self employment opportunities by making them entrepreneurs, the scheme of **“Agri-Clinics and Agri-Business Centres”**, was launched on 9th April, 2002 to strengthen the transfer of technology and agricultural extension services and also to provide self employment opportunities to the technically trained persons. The main objectives of the ACABCs scheme were (1) To provide extension and other services to the farmers on payment basis (2) To support agricultural development and entrepreneurship and (3) To promote self employment under the central sector scheme provision given by the Govt. of India. Hence, this study was conducted at the instance of the Ministry of Agriculture and Farmers Welfares, Govt. of India by Agro-Economic Research Centre, University of Allahabad as the All India Coordinator with 3 participating AERCs to assess the impact of agricultural extension services to farmers by ACABCs in Uttar Pradesh.

This study reveals that after the implementation of ACABCs scheme, the farmers had invested higher amount of other inputs on raising crops as well as rearing animals in comparison of own inputs on their farms which clearly indicates that agri-ventures established successfully under ACABCs scheme have definitely supplied other inputs on payment to the beneficiary farmers in the state of Uttar Pradesh. This study also reveals that although the functioning of ACABCs scheme was in nascent stage in U.P., the established agri-ventures had just started their business, hence, they were found selling only inputs such as seeds, fertilizers,

animal feeds and pesticides etc. and a little expert advices and extension services on the farms of beneficiary farmers.

This study has been planned and finalized by Dr. Rajendra Singh (Ex. R.O.) AERC, Allahabad who also prepared schedules, master sheets, analytical tables, supervised investigation and analysis of data and drafted the report. Sri. Haseeb Ahmad conducted field survey, tabulation and analysis of data. Shri S.N. Skukla conducted field survey and Dr. H.C. Malviya also conducted field survey and tabulation of data. Smt. N. Nigam has typed the report and correspondence letters. Dr. Rajendra Singh also prepared the executive summary of this study report.

Our thanks are due to Dr. P. Chanrashekara, Director, MANAGE, Hyderabad who facilitated in conducting this study and Sri Vijay Rajmohan, Director Extension, Sri S.K. Mishra, Joint Director, Extension Management and Sri Sajith Kumar Kunhalath, Joint Director Extension Management., Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture, G.O.I., New Delhi for their valuable suggestions. Thanks to coordinators, N.T.Is of U.P. for cooperating in this study.

The reference year of the study was 2015-16. Any Comments and suggestions for improvements in the report of this study will be acknowledged thankfully.

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EXECUTIVE SUMMARY

The scheme of Agri.-clinics and Agri.-business centres (ACABCs) was launched on 9th April, 2002 under the central sector scheme provision with the main objectives i.e. (1) to provide extension and other services to farmers on payment basis, (2) to support agricultural development and (3) To create self employment opportunities to unemployed agriculture graduates. These objectives were to be fulfilled by facilitating agricultural graduates to set-up Agri. ventures for delivering value added extension services and advices to farmers besides giving self-employment opportunities to agri-preneurs. National Institute of Agricultural Extension Management (MANAGE) is the sole Nodal Implementing Agency responsible for training these agricultural professionals and offering hand holding support to establish Agri. Ventures in partnership with more than 100 Nodal Training Institutions (NTIs) scattered across the country. The agri-preneurs trained under ACABC scheme become eligible start-up loans from the scheduled banks and the subsidy from the NABARD. The agricultural Technology Management Agencies (ATMAs) at district level are mandated to make use of the services of established agri.-preneurs in providing value added extension services to farmers on the public and private partnership mode.

To tap the potential of teaming unemployed agriculture graduates and at the same time to strengthen the extension services provided to the farmers and to provide them employment opportunities by making them entrepreneurs, the Union Finance Minister had announced in the Budget Speech on Feb. 28th , 2001, for the year 2001-02, a scheme for setting-up Agri-clinics and Agri.-business Centres by the agriculture graduates with the support of National Bank for Agriculture and Rural Development (NABARD). Today agriculture is not only seen as means of solving food problem with in the country, but also as an earner of the foreign-exchange. This really demands increased productivity of international quality at minimum possible cost. To accomplish such aspirations, agriculture extension services need strengthening by providing farmers, information, training and support for adopting improved production technologies. Extension services have kept pace with the changing times after independence. MANAGE is responsible for providing training to eligible candidates through its nodal institutes and motivate them for setting-up agri.-clinics and agri.-business centres. MANAGE also ensures sponsoring of

sufficient number of cases to the participating banks for financing under the ACABC scheme and arrange to establish required number of units at the ground level as envisaged to make the scheme of ACAB a success.

Therefore, the study entitled as **“Impact study on Agricultural Extension Services to Farmers by Agri.-Clinics and Agri.-Business Centres (ACABCs Scheme) in Uttar Pradesh”**, conducted at the instance of the Ministry of Agriculture and Farmers Welfare, Govt. of India by the Agro-Economic Research Centre, University of Allahabad as an all India coordinator with 3 participating AERCs, will be of paramount importance to all who are concerned with the increased productivity of crops and animals across the country.

This study was conducted with the following main objectives:-

1. To identify the benefits accrued to farmers through extension services by ACABCs.
2. To analyse comparative effectiveness of extension services to Beneficiary farmers by ACABCs and non-beneficiary farmers of the same area.
3. To assess the extent of effects on income of beneficiary farmers through extension services by ACABCs and the income of non-beneficiary farmers.
4. To examine the problems / factors hampering the effects of extension services on farmers by ACABCs.
5. To explore measures and suggestions for strengthening extension services by ACABCs more effective to farmers.
6. To suggest changes in imparting extension services to farmers under the ACABCs Scheme.

This study was confined to the state of Uttar Pradesh individually from the four states undertaken jointly identified for this All India Coordinated study viz. Assam, Telengana, Maharashtra and Uttar Pradesh being coordinated by A.E.R.C. University of Allahabad, Allahabad. To represent U.P. well two economic regions potential to ACABCs scheme from the four distinct economic regions viz. Western, Eastern, Central and Bundelkhand region, two regions i.e. Western and Eastern were selected randomly on the basis of higher number of agri.-ventures established therein successfully. From these two selected regions one district from each region was undertaken randomly on the same basis. Such districts were (1) Bareilly from western and (2) Varanasi from Eastern region. From each of these two districts, thus, selected five agri.-ventures

benefiting higher numbers of farmers were chosen randomly from each of these, 10 agri-ventures, thus, selected lists of beneficiary farmers were undertaken. These lists were further categorized into (1) Marginal farmers (0-1ha.), (2) Small farmers (1.01 ha.) (3) Medium farmer (1-4 ha.) and (4) Large farmers (Above 4 ha.) separately according to (1) Proper Agri. services, (2) Allied Agri. services and (3) Both Agri. + Dairy services. The ultimate sample beneficiary farmers were chosen randomly (@) 10 beneficiary farmers per selected agri. venture making total 50 sample beneficiary farmers per district proportional to the total numbers in each of three categories of agri. services. Thus, 100 sample beneficiary farmers were chosen on an overall. As control group the samples of non-beneficiary farmers (@) 5 samples per agri. venture were undertaken from the same area of the agri.- ventures making 25 non-beneficiary farmers per district. Thus, 50 non-beneficiary farmers were chosen randomly on an overall for assessing the impact of agricultural extension services through ACABCs scheme. The reference period of this study was agricultural year 2015-16.

► This study reveals that the average size of holdings among the beneficiary farmers was very small i.e.1.63 ha. in the area under study. All the beneficiaries had availed benefits under ACABC Scheme in U.P. Also majority of beneficiaries were practicing subsidiary occupations along with their main occupations, enriching economic status.

► The gross cropped area during the kharif seasons was estimated as 1.63 ha per farm of beneficiaries and the total was irrigated. The gross cropped area during Rabi season too was equally and fully covered on the farms of beneficiaries under different services. While during zaid season no cereal crop was grown. Only other crops were grown and as a result the gross cropped area in zaid was 0.63 ha. per farm on an average.

► The gross cropped area of all the three season of the reference year was estimated as 3.75 ha. per farm and the total area was irrigated. Thus, gross irrigated area was equal to gross cropped area which confirms that the irrigation intensity was 100 percent in the area under study.

► Regarding inputs and outputs of kharif crops, it was found that the other inputs were on higher side than the own inputs. The maximum outputs were received from cereals after incurring maximum inputs on cereals. The minimum inputs were incurred on pulses and the minimum outputs were received from other kharif crops.

► Among the different categories it was found that farms under allied agri. services were the maximum income generating farms against the minimum income generating farms under the

proper agri. services in the area under study and as such CABC scheme performed better in cases of the farms under allied agri. services to the farmers beyond the higher inputs.

▶ As regards the inputs and outputs of rabi crops on the farms of beneficiaries, it was found that outputs was comparatively much higher from other crops which confirms that other crops were cared more under ACABC scheme in the area of study.

▶ Among the different categories of farms, it was found that the farms under the category of both agri.+ dairy services were comparatively more profitable having maximum outputs per farm beyond the maximum inputs incurred on the farms under this very category.

▶ It was also evidently clarified that during zaid season only a few pulses and other crops including horticultural crops were grown in the whole area under study.

▶ As regards the inputs on zaid crops, the farms under the category of both agri+ dairy services were found to be more expensive than the farms under the other two categories in the area under study.

▶ Among the inputs the other inputs procured from agri. ventures or elsewhere was found higher than the own inputs. This confirms that the sample beneficiaries had definitely availed the services of agri. ventures established in their areas.

▶ The farms under the category of allied agri. services were found more productive and profitable in comparison of the farms under the categories of both agri+ dairy services in rearing milch animals because net income per farm was maximum i.e. Rs. 42,500 on the farms under the category of allied agri. services.

▶ It was also safely concluded on the basis of attractive additional income that rearing milch animals on the farms alongwith the other services was considerably profitable in the area under study.

▶ Regarding outputs, inputs and net incomes from total animals reared by beneficiaries it was found that the farms under the category of allied agri. services were comparatively more productive in rearing animals on their farms in comparison of the farms under other two categories.

▶ The higher amount of other inputs incurred in rearing animals in comparison of own inputs clearly indicates that agri. ventures established under ACABC scheme have definitely supplied other inputs on payment to the beneficiaries in the area under study.

- ▶ From hiring machines etc. it is clarified that the functioning of ACABC scheme was in nascent stage in the area under study. The established agri. ventures had just started their business and hence they were found selling only the inputs such as seeds, fertilizers, animal feeds and pesticides etc.
- ▶ In case of hiring implements by beneficiaries from agri.-ventures it was obviously clear that ACABC scheme was just started in the area under study. The established agri. ventures were in nascent stage and hence they had not yet started hiring machines and implements to their beneficiaries in the area under study.
- ▶ Regarding training received by beneficiaries from agri. ventures out of 100 sample farmers 71 had told to receive only informal training and 29 had told for formal training which was useful but informal training was not at all useful for them.
- ▶ Out of 100 beneficiaries 66 had told to receive supports on marketing of outputs and 42 on production trends from the agri. ventures.
- ▶ The majority i.e.79 sample beneficiaries out of 100 sample farmers had reported to receive extension services and expert advices on farm technology from agri.-ventures which definitely increased the incomes of beneficiaries of ACABC scheme in U.P.
- ▶ 89 out of 100 sample farmers had reported that production of cereals particularly paddy in kharif and wheat in rabi season had increased definitely after the implementation of ACABC Scheme in their areas in U.P.
- ▶ 21 out of 100 sample farmers had told that production of their milch animals had increased satisfactorily after the establishment of agri-ventures under ACABC scheme in U.P. under their areas. Thus, incomes from cereals (paddy & wheat) and from milch animals had definitely increased in the area under study.
- ▶ About the sales of inputs and other services provided by agri. ventures to beneficiaries it was found that only the inputs such as seeds, fertilizers, pesticides and animals feeds were made available to the needy farmers on payment. No other services were provided except a few extension services and expert advices.
- ▶ Therefore, it is concluded that ACABC scheme in U.P. was in the nascent stage in the area under study. But it was a good beginning as opined and viewed by majority of beneficiaries.

- ▶ Among the sample non-beneficiary farmers the average size of holding was estimated as 1.70 ha. in the ACABC scheme area of U.P. The majority i.e. 44 out of 50 non-beneficiaries had subsidiary occupations and 6 had reported to have memberships of cooperative societies.
- ▶ During kharif season the maximum of the cropped area was under cereals and other crops. The area under pulses was negligible.
- ▶ During rabi season too the maximum coverage was under rabi cereals and the coverage was better on the farms under the category of both agri.+ dairy services as compared to that on the farms of other two categories in the area under study.
- ▶ During zaid season no cereal crop was grown at all on any farm in any category of non-beneficiary sample farmers. Pulses too were grown on a negligible area.
- ▶ It was also obviously clear that the farms under the category of both agri.+ dairy services were cropped more intensively in comparison of the farms under other two categories which confirms that effects of ACABC scheme were more on the farms of the category under both agri.+ dairy services than that on the farms of other two categories.
- ▶ Rabi crops on the farms of non-beneficiary farmers were significantly productive and profitable, other rabi crops were also found to be productive and farms under the category of both agri.+ dairy services were comparatively more productive investing higher inputs.
- ▶ Among zaid crops only other crops were grown on the farms of the non-beneficiaries of the category of both agri. + dairy services in the area under study.
- ▶ About the net income from milch animals it was found that there was a net income of Rs. 17,451 per farm which confirms that milch animals reared by non-beneficiary farmers were assured sources of their income.
- ▶ The outputs per farm received from milch animals was highest on the farms under the category of allied agri. services as compared to that on the farms under the categories of proper agri. services and both agri.+ dairy services. Thus, the net income was highest on the farms under the category of allied agri. services.
- ▶ The net income from total animal of Rs. 18,876 per farm was a considerable income in addition to the income from crop enterprises on the farms of non-beneficiary farmers in the area under study.
- ▶ Majority of non-beneficiary farmers were not at all aware about agri. clinic and agri. business centres. Those who were aware, they had not availed the services of agri.-ventures due

to long distances and inputs being costly. It was also clarified that ACABCs were just established recently in the area under study.

► The majority of non-beneficiary farmers had reported not to receive any such extension services from any of the government line departments or any private agencies related to agricultural extension services. Among different categories of services, the category of both agri.+ dairy services had performed better in the area under study.

► Regarding satisfaction with inputs and outputs, one fourth of the non-beneficiaries had told to be satisfied with inputs and 50 per cent of non-beneficiaries had to be satisfied with outputs and those who were unsatisfied had told adulteration in puts to be the main reason for low outputs.

► It was also found that the beneficiary farmers under allied agri. services and non-beneficiary farmers under both agri.+ dairy services were comparatively more prosperous in the area under study. The irrigation intensity on all the farms under all the categories was estimated as 100 percent.

► The average cropping intensity on the farms of both types of sample farmers was similarly estimated as 230 percent which clarified well that almost all the farms were totally cultivated during kharif and rabi season and partly during zaid season.

► The inputs incurred and outputs received both were higher on the farms of beneficiaries. Therefore, the net income per farm was considerably higher on the farms of beneficiaries. The input-output ratio also indicated that turnover was higher on the farms of beneficiaries which clarified that there were effects of ACABCs scheme on farmers in U.P.

VI.2. Policy Prescriptions

Based on the main findings of the present study, the following policy prescriptions are being conveyed to the DAC, Ministry of Agriculture and Farmers welfare, Government of India.:-

► Since, only small farmers of a poor section (O.B.Cs.) of farming societies could have been attracted so far by the established agri. ventures. Therefore, agri. ventures must strengthen their agri. extension services more profoundly through more and more demonstrations as well as training programmes on the fields of beneficiary farmers.

- ▶ When the total area was irrigated on almost all the sample farms then why the coverage under zaid season was scanty. The agri. ventures must cooperate and support their beneficiary farmers to increase their coverage during zaid for increasing their cropping intensity.
- ▶ Growing cereal crops was most expensive to majority of beneficiaries. Hence, they must shift to pulses or other crops which require minimum inputs. The agri. ventures must encourage their beneficiaries to grow other crops (vegetables or cash crops).
- ▶ As the farms under the category of allied agri. services were found more productive and profitable. Therefore, farmers must shift to rearing milch animals on their farms for more profit.
- ▶ On the basis of attractive additional income through rearing milch animals alongwith other services which was considerably profitable in the area of study, the farmers must adopt this service on their farms. Agri. ventures must also support about such adoption of services.
- ▶ The agri. ventures have been found supplying more other inputs for rearing milch animals under ACABC scheme. This practice must be increased on larger scales so that more and more farmers may shift towards rearing the milch animals on their farms.
- ▶ Since majority of beneficiary farmers had received extension services on machines and dairying, they must be given more and more extension services through more demonstration and training programmes.
- ▶ It has been found that the functioning of ACABC scheme was on nascent stage in the area under study and the agri. ventures were found selling only a few inputs. Hence, the agri. ventures must firstly demonstrate and train farmers about the use of inputs then the inputs will be sold automatically.
- ▶ Majority of beneficiaries had told about informal training to them by agri. ventures which was not at all useful. Hence, only formal training of long duration must be facilitated to all the beneficiary farmers.
- ▶ Among the supports to beneficiaries by agri. ventures only supports on marketing of outputs and production trends was given half heartedly. Hence, every agri. venture must arrange for full supports to farmers on all the aspects of every enterprise adopted.
- ▶ Among the extension services and expert advices, the majority farmers told that these were on cropping practices and protection from pests and diseases, which increased their incomes definitely. Therefore, expert advices on other aspects of farming starting from

preparation of land to final disposal of outputs will certainly increase their income. So agri. ventures must take utmost care of it.

▶ Although, ACABC scheme was in nascent stage, but it was a good start as opined by majority of farmers. Therefore, all the concerned agencies such as MANAGE, NABARD, Ministry of Agriculture and Farmer Welfare, Government of India and NTIs must envision to make the ACABCs purposeful for the needy farmers.

▶ Among the non-beneficiary farmers also their holding size economic, social and educational status was more or less similar and there was dominance of O.B.Cs on an overall all average. They must take benefits of ACABC scheme.

▶ The cropping pattern of non-beneficiary farmers was also similar as during kharif and rabi seasons the coverage under cereal crops (Paddy and Wheat) was higher and during zaid only pulses and other crops were grown only by a few farmers. Irrigation intensity was 100 percent. Hence, zaid coverage must be increased by the farmers.

▶ Among non-beneficiaries too, the farms under the category of both agri. + dairy services were cropped more intensively in comparison of the farms under the other two categories and as a result the farms under both agri. + dairy category were more productive. Hence, the farmers of other two categories must adopt both agri. + dairy services on their farms.

▶ Rearing milch animals by non- beneficiaries on their farms in addition was found to be an assured source of their income. Therefore, farmers must adopt this service to increase their income.

▶ Majority of non-beneficiary farmers were not at all aware about the ACABCs scheme. Therefore, more demonstrations and extension on large scale are required by all the implementing agencies involved under ACABC scheme.

▶ Only one fourth of the sample beneficiary farmers were satisfied with inputs and 50 percent were satisfied with outputs and those who were unsatisfied told the main reasons i.e. adulteration in inputs and costly inputs for low outputs on their farms.

▶ As the beneficiary farmers under allied agri. services and non-beneficiary farmers under both agri.+ dairy services were found to be more profitable. Therefore, these two main services must be adopted by all the farmers for prosperity.

- ▶ The average cropping intensity on the farms of both beneficiaries and non- beneficiaries was similarly estimated as 230 percent. Therefore, it must be increased atleast to 300 percent when the farms are 100 percent irrigated in the area under study.
- ▶ The net income per farm as well as the turnover was higher on the farms of beneficiary farmers than that on the farms of non-beneficiary farmers. Therefore, it is concluded that it was definitely the effects of the implementation of ACABCs scheme in the area of study in U.P.
- ▶ It is to be examined whether there is any need for increasing the number of NTIs in the country.
- ▶ Issue of one NGO running multiple NTIs be examined.
- ▶ Issue of providing advanced learning equipments in the experience for better learning experience by the trainees to be examined.
- ▶ Issue of providing the network system of trainees and trained candidates with, Govt., MANAGE, NABARD etc.
- ▶ Suggestions to overcome the difficulties faced by the agrepreneurs to avail credit facilities from banks.

CHAPTER-1

Introduction

1.1.Statements on the Problem under Study

The scheme of Agri-Clinics and Agri. Business Centres (AC & ABC) was launched on 9th April, 2002 under the Central Sector Scheme provision with the main objectives i.e. (1) to supplement efforts of public extension by necessarily providing extension and other services to the farmers on payment basis or free of cost as per business model of agri-preneur, local needs and affordability of the target group of farmers, (2) To support agricultural development and (3) To create gainful self employment opportunities to unemployed agricultural graduates, Agricultural diploma holders, intermediate in agriculture and biological science graduates with post-graduate in agri-related courses. These objectives are to be fulfilled by facilitating qualified agricultural professionals to set-up Agri-Ventures that can deliver value added extension services and advices to farmers at their door steps, besides providing self employment opportunities to Agri-preneurs.

The National Institute of Agricultural Extension Management (MANAGE) is the Sole Nodal Implementing Agency responsible for training these agricultural professionals and offering hand-holding support to establish Agri-ventures in partnership with more than 100 Nodal Training Institutes (NTIs) scattered across the country. The agri-preneurs trained under the scheme of AC&ABC become eligible to start-up loan from the scheduled banks and the subsidy from the NABARD. The Agricultural Technology Management Agencies (ATMAs) at district level are mandated to make use of the services of established age-preneurs in providing value added extension services to farmers on the public and private partnership mode.

Agricultural extension Services to the farmers of India still need ample information training and support for adopting improved production technologies. Because, agricultural extension services throughout the country are suffering from acute inadequate quality and quantity of skilled manpower. Quantitatively the current farmers to extension worker ratio has been worked out as 1000:1 which means that for every 1000 farmers there is only one extension worker in the country. Under such circumstances it becomes really extremely difficult for an extension worker

to provide quality agricultural extension services to a teeming and large number of farmers and as a result, the quality time of an agricultural extension worker available to each farmer becomes indeed minimum and inadequate. Apart from it, only about 20 percent of the agricultural extension workers are qualified agriculture graduates and the rest of the agricultural extension workers become quite unable and incapable to explain the complex issues of agriculture as well as agri-business to the farmers. Moreover, a large number of extension gaps have been observed in the transfer of technology processes in the country as a whole. Therefore, to provide value added agricultural extension services to the teeming farmers by the additional qualified and skilled manpower and adequate infrastructure is an urgent need of the hour in the country.

The scheme of Agri-clinics and Agri-business Centres was launched to strengthen the transfer of technology and extension services and also to provide self employment opportunities to technically trained persons. Accordingly this scheme was designed to help develop opportunities for private extension, to lower the burden on public funding, to offer a wider range of advice in specialized areas than is possible through public extension and to develop challenging job opportunities for about 15000 agriculture graduates produced by the State Agriculture Universities (SAUs) every year and nearly half of these graduates of agriculture sciences go for higher studies in Indian Universities and abroad. Only about 2000 agriculture graduate get jobs in public and private sectors leaving the rest as unemployed graduates. Thus, to tap the potential of these unemployed graduates and at the same time to strengthen the extension services provided to the farmers and to provide them employment opportunities by making them entrepreneurs, the Union Finance Minister had announced in the Budget speech on February 28, 2001 for the year 2001-02, a scheme for setting-up Agri-clinics and Agri-Business Centres by the agriculture graduates with the support of National Bank for Agriculture and rural Development (NABARD). Today agriculture is not only seen as means of solving food problems within the country, but also as an earner of the foreign exchange. This really demands increased productivity of international quality at minimum possible cost. To accomplish such aspirations, agriculture extension services need strengthening by providing farmers, information, training and support for adopting improved production technologies. Extension services have kept pace with the changing times after independence.

MANAGE is responsible for providing training to eligible candidates through its nodal institutes and motivate them for setting-up Agri-clinics and Agri-business Centres. MANAGE also ensures sponsoring of sufficient number of cases to the participating banks for financing under the ACABC Scheme and arrange to establish required number of units at the ground level as envisaged to make the scheme of ACABC a success.

The Ministry of Agriculture and Farmers Welfare, Government of India in association with the NABARD has launched this unique scheme to adopt better methods of farming to each and every farmer across the country. Committed to this scheme, the Government is also providing start-up training to the graduates in agriculture or any subject allied to agriculture like horticulture, sericulture, veterinary science forestry, dairy, poultry farming and fisheries etc. Those completing the training can apply for special start-up loans for venture.

The scheme of AC&ABC is well linked with Agricultural Technology Management Agencies (ATMAs) constituted by the States under the scheme **“support to state Extension Programme for Extension Reforms”**. The Extension Reforms Scheme mandates that minimum 10%resources on extension activities are to be utilized through the non-governmental Sector, which also includes, Agri-preneurs. ATMAs are encouraged to implement extension activities through Agri-preneurs.

The ventures are also utilized to provide input services like plant Saplings, Seeds and micronutrients under ongoing flagship schemes implemented by the department. Special emphasizes are made to review the progress of involvement of the agri-preneurs in ATMA activities on half yearly basis by state nodal officer, Government of India and MANAGE. ATMA shall also strive to achieve establishment of at least one agri-clinic every year in each block depending on the availability of trained candidates under the scheme of AC & ABC. For providing support to the agri-preneurs, for making business more viable, Govt. of India institutions such as NSC (National Seeds Corporation), SFCI (State Farm Corporation of India), IFFCO (Indian Farmers Fertilizers Cooperative Ltd.), KRIBHCO (Krishak Bharti Cooperative LTD), SFAC (Small Farmers Agri-Business Consortium) and State Agro-Industries Corporation etc are advised to engage the agri-preneurs as their authorized dealers on the preferential basis without affecting their existing network. The linkages with these agro-industries are reviewed on half yearly basis.

The Indicative Activities of Agri-Ventures under AC & ABC Scheme

The following activities are done by the Agri-Ventures under the AC & ABC Scheme implemental in the country:-

- (1) Extension consultancy Services,
- (2) Soil and water quality cum inputs testing laboratories,
- (3) Crop protection services including pest surveillance, diagnostic and control services,
- (4) Micro-propagation including plant tissue culture labs and hardening units,
- (5) Production, maintenance and custom hiring of agricultural implements and machinery including micro irrigation systems
- (6) Seed production and processing units,
- (7) Vermi-culture units
- (8) Production of bio-fertilizers, bio-pesticides and other bio-control agents,
- (9) Apiaries (bee-keeping) and bee-products processing units,
- (10) Agricultural insurance services,
- (11) Agro-tourism,
- (12) Agri-journalism-film production, farm publications and exhibitions,
- (13) Poultry and fishery hatcheries,
- (14) Livestock health covers veterinary dispensaries and services, including frozen semen banks and liquid nitrogen supply and artificial insemination,
- (15) Information technology kiosks (Open fronted huts or cubicles)
- (16) Feed production marketing and testing units,
- (17) Value addition Centres,
- (18) Cool-chain including cold storage units,
- (19) Post harvest management Centres for sorting, grading, standardization, storage and packaging
- (20) Metallic and non-metallic storage structures,
- (21) Horticulture clinic, nursery landscaping, floriculture
- (22) Sericulture,
- (23) Vegetable production and marketing,
- (24) Retail marketing outlets for processed agri-products

- (25) Production and marketing of farm inputs and outputs,
- (26) Contract farming,
- (27) Crop-production and demonstration,
- (28) Mushroom production
- (29) Production, processing and marketing of medicinal and aromatic plants
- (30) Production units like dairy, poultry, piggery, fisheries, sheep rearing, goat rearing, emu rearing, rabbit rearing etc.
- (31) Rural godown and
- (32) Direct marketing

The beginning of Agri-clinics and Agri-Business Centres in the country to serve the farmers is really a welcome step to strengthen the support and extension services in agriculture. In the present World of liberalization and globalization, the transformation of agriculture from the subsistence to the commercialization is needed urgently by the country. It is certain that this unique scheme of AC & ABC will help farmers to improve their farm income and achieve better position in the society. Thus, the Agri. Clinics and Agri. Business Centres are assumed to bring social and economic upliftments among the farming community of the country. The success of this scheme of AC & ABC is directly proportional to the success of the Agripreneurs and the farmers. The key objective of this scheme is to provide accountable agricultural extension services to the needy farmers on payment basis. The Agri-Clinics and Agri-Business Centres will survive and succeed only when these will perform well to provide the useful and relevant agricultural extension services to the needy farmers of the country.

This scheme aims to tap the expertise available in the large pool of agriculture graduates. Irrespective of whether they are fresh graduates or not or whether they are currently employed or not, they can set-up their own agri-clinics or agri-business Centres and offer professional extension services to innumerable farmers. Agri-clinics and Agri-Business Centres provide paid services for enhancement of agricultural production as well as income of farmers. These centres need to advice farmers on crop selection, farm practices, post-harvest value added options, key agricultural information, price trends, market news risk mitigation and crop insurance, credit and input access and sanitary considerations.

In this nation-wide initiative specialized training is provided as an integral part to agricultural graduates interested in setting-up such agri-clinics or agri.-business centres. This training is provided free of cost. A two month training course is offered by the selected nodal institutes across the country. Initiated by SFAC (Small Farmers Agri-Business Consortium) and coordinated by MANAGE, the training course comprises Entrepreneurship and Business Management, as well as skill improvement modules in their chosen areas of activity.

As regards the bank loan available for Agri-clinics and Agri-business centres, a ceiling of project cost for subsidy has been enhanced to Rs 20 lakhs for individual project and Rs. 25 lakhs in case of extremely successful individual projects and Rs. 100 lakhs for a group project. Depending on the type of venture one wants to set-up with a moratorium of up to 2 years, Agri-clinic and agri-business centre loans can be repaid within 5 to 10 years as per easy installment plans. The rate of interest, margin and security on loans will be decided by the respective bank as per RBI norms. Depending on his entitlement, he can even apply for margin money assistance.

Regarding incentives as per the ACABC scheme revised guide-lines issued in 2010, the Department of Agriculture and cooperation, Ministry of Agriculture Government of India made provision for granting an incentive of Rs. 1000/- to each Agri-preneur who established Agri-venture on or 4th August, 2010 under the ACABC Scheme. Accordingly ACABC scheme 2010 states as follows:- **“Every candidate who establishes his/her venture and submits proof to that effect is eligible to receive an incentive of Rs. 1000/- This incentive amount may be sent through demand draft or crossed cheque to the candidate through respective Nodal Training Institute (NTI) on submission of advance receipt to MANAGE”**

Thus, all the Agri-clinics and Agri-business centres are the best platforms for proving empowerment to farmers in planning and implementation of extension activities. These centres are completely involved in the ATMA (Agri-Culture Technology Management Agency) programme and several other central and state government programmes.

The training programme is specifically designed to tone up the agri-business skills in 60 days along with the development of human being with spirituality in holistic approach and complete involvement and commitment to serve the society. Innovative training programme is conducted more through practical learning and by interaction with the successful agri-preneurs. Under

handholding activities the institute has established monitoring cell headed by coordinator. The coordinator monitors regularly the progress of the trainees.

1.2:- Concept of Agri- Clinics and Agri-Business Centres

1.2.1:- Concepts of Agri-Clinics:

Agri-clinics are envisaged to provide expert advice and services to farmers on various technologies including soil health, cropping practices, plant protection, crop insurance, post harvest technology and clinical services for animals, feed and fodder management, prices of various crops in the market etc. which would enhance productivity of crops/animals and ensure increased income to farmers (Revised Agri-clinics and Agri-Business Centres (ACABC) Scheme-2010)

1.2.2:- Concept of Agri-Business Centres:-

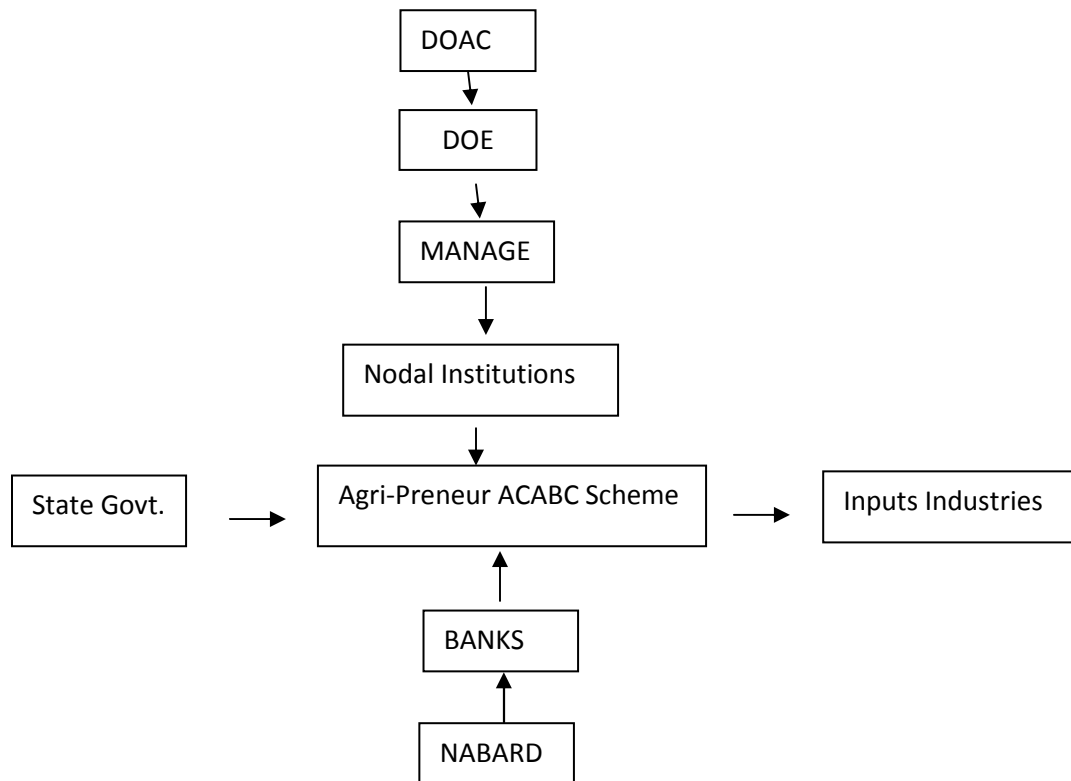
Agri-business centres are commercial units of agri-ventures established by trained agriculture professionals. Such ventures may include maintenance and custom hiring of farm equipment, sale of inputs and other services agriculture and allied areas, including post harvest management and market linkages for income generation and entrepreneurship development. (Revised Agri-clinics and Agri-Business Centres (ACABC) Scheme, 2010)

1.2.3:- Some Eligible Activities under Agri-clinics and Agri-Business Centres:-

Apart from aforementioned indicative activities by Agri-ventures under AC&ABC Scheme, all other activities in agriculture, horticulture, fisheries, allied sectors or combination of two or more of the aforementioned indicative activities selected by the candidates, which generate income to the agri-preneurs and render extension services to the farmers will also be eligible under the AC & ABC scheme. The implementing agency of AC & ABC scheme i.e. MANAGE also coordinates with the State departments of Agriculture and Horticulture and inform them about the agri-ventures established successfully in their States. This very well helps the State Governments to network with the agri-ventures particularly agri-clinics and input supplies, for involving them in their own extension programmes. Such involvement which is likely to be mutually beneficial will certainly help in addressing a key objective of the AC & ABC Scheme. Also a suitable mechanism can be developed to assess the results of such association.

I.2.4:-The Structure of AC & ABC Scheme

The scheme of AC&ABC is actually operated by different entities that perform their individual task to operate the ACABC scheme in a successful manner. The detailed explanation of the tasks and responsibilities of each entity in the successful operation of ACABC scheme is detailed as follows alongwith its diagrammatic structure:-



Figures-I-1

(Structure of AC&ABC Scheme)

Details of the Structure of ACABC Scheme:-

DOAC:- Department of Agriculture and Cooperation, Ministry of Agriculture and Farmers welfare provides the fund for ACABC scheme through the E.M. (Extension Management) Section of D.O.E. (Directorate of Extension)

DOE:- Directorate of Extension looks after all the extension activities of the DOAC (Department of Agriculture and Cooperation in the Ministry of Agriculture and Farmers Welfare).

MANAGE:- MANAGE as an autonomous body under the Ministry of Agriculture (MOA & FW) has been appointed as the implementing agency of AC&ABC Scheme. It is responsible for reviewing the performance of the nodal institutes, deciding upon the training content, methodology and duration. To become a part of the selection committee for choosing the eligible candidates and setting the criteria for selection of nodal institutes. It is the monitoring agency of the ACABC scheme also. As the implementing agency MANAGE broadly performs the following activities:-

1. Selection of Nodal Institutes.
2. Preparation of Training Modules.
3. Monitoring of the performance of the Nodal Institutes (NIs)
4. Managing and Releasing of Funds.

The parameters on which the performance of MANAGE has been assessed is based on its role and responsibilities:-

1. Selection of Nodal Institutes:

It was observed that the Nodal Institutes selected on the basis of the present selection criteria, these have not been able to show impressive results. The Nodal Institutes selected under the present framework have shown dismal performance in terms of generating substantial agri-preneur, selection of non-competent nodal institutes have also led to further elimination of these Nodal Institutes at later stage.

2. Preparation of Training Modules:

The course content is designed to have 60% time allocated for building theoretical understanding and 40% for practical experience. The major courses were on personality enhancement and motivation, potential agri-business activities, business and motivation, potential agri-business activities, business and financial management skills, communication and writing skills, market research and survey, successful entrepreneurs and exposure visit, computer and handholding support.

3. Monitoring System

NIs are regularly monitored by MANAGE. In case if any institute fails to meet the evaluation criteria it is removed from the list of the nodal institutes. If Nodal Institute does not meet the 35% criteria for 6 months in respect of the success rate then its name will be deleted. The national rate is 32.5% on an average.

4. Fund Disbursement

Among the States, U.P. and Maharashtra are the two leading States accounting for nearly one third of the total funds released. This calls for extensive promotional efforts for the ACABC Scheme in other States.

Nodal Institute (NI)

Nodal Institutes are institutes selected by MANAGE for conducting the training programmes for selected agriculture graduates and assist them in preparing bankable project. Once the project is over, assist them in sanctioning of loan and successfully setting-up of the ventures. Nodal Institutes play the critical and most important role in the success or failure of the ACABC Scheme. These are the mentors, the trainers and the guides for the agri-preneurs who take-up this training to start a venture of their own. The role of nodal institutes starts from the selection procedure till the time a venture is set-up. The contribution of Nodal Institute is maximum to make the scheme of ACABC a success. Thus, the efforts of Nodal Institutes have an impact on the performance of ACABC Scheme.

Banks:- These banks may be either Nationalized, commercial, cooperative or regional rural banks who would be the financing institution in the ACABC Scheme. These banks are responsible for processing loan proposals and provide loans on approved proposals to the trained agriculture graduates under the ACABC Scheme. Apart from providing loans to the agri-preneurs, these banks are responsible for implementing announced policy for providing credit to such proposals.

NABARD:- NABARD is the nodal institute for banks. The primary objective of NABARD is to provide refinancing to the banks and circulate financial guidelines pertaining to the scheme for implementation. NABARD has circulated comprehensive guidelines to the banks. However, it is

found that generally the banks go by their own project appraisal norms without giving any preferential treatment to the projects under the ACABC scheme. The banks insist on collateral security which becomes one of the constraints for starting the agri-venture. NABARD cannot interact with each branch yet a system can be evolved wherein the nodal institutions in collaboration with the regional representative of NABARD may take-up specific cases with the concerned banks for according priority to the trained graduates for considering their applications for funding the projects.

Agri- Preneurs

Agri-preneurs are the ultimate beneficiaries of the ACABC Scheme. They are agriculture graduates, post graduates and even Doctorates who undertake training under ACABC Scheme and provide specialized extension and other services on fee-for-service basis and to supplement the efforts of public extension by providing economically viable enterprises in self employment mode. Employment generation is one of the key objectives of the ACABC Scheme. It was launched to provide employment to agri-graduates who pass-out every year from Agri. Universities throughout the country.

Input-Industry

Inputs-industries are allied industries which can provide dealership, input-stocking support etc. to the agri-entrepreneurs thereby creating a regular source of income for them.

State-Government

The participation of State Governments comes in the form of providing priority to trained graduates as grant of license for agri-inputs, facilitate involvement of ACABC in extension services.

I.2.5:- Eligibility Criteria for Candidates under ACABC Scheme:-

The ACABC Scheme is open to the following categories of candidates:-

- (i) Graduates in agriculture and allied subjects from State Agricultural Universities, Central Agricultural Universities, Universities recognized by Indian council of Agricultural Research and University Grants Commission. Degree in Agriculture and

- allied subjects offered by other agencies are also considered subject to approval of Department of Agriculture and Cooperation, Government of India on recommendation of the State Government.
- (ii) Diploma holders, Post Graduate Diploma Holders in Agriculture and allied subjects from State Agricultural Universities, State Agriculture and allied Departments and State Department of Technical Education. Diploma in Agriculture and allied subjects offered by other agencies are also considered subject to approval of Department of Agriculture and Cooperation, Government of India on the recommendation of the State Government.
 - (iii) Biological Science Graduates with Post Graduation in Agriculture and allied subjects.
 - (iv) Degree courses recognized by UGC having more than 60% of the course content in Agriculture and allied subjects.
 - (v) Diploma, Post Graduate Diploma courses with more than 60% of course content in Agriculture and allied subjects, after B.Sc with Biological sciences, from recognized colleges and universities.
 - (vi) Agriculture related courses at Intermediate level with at least 55% marks.

The ACABC scheme covers full financial support for training and handholding, provision of loan and credit linked back ended composite subsidy. Every candidate who establishes his venture and submits proof to that effect is eligible to receive an incentive of Rs. 1000/- This incentive amount may be sent through demand draft or crossed cheque to the candidate through respective NTI on submission of advance receipt to MANAGE.

I.2.6:- Certificates to Successful Ventures:-

Certificates are issued to trainees by MANAGE after successful completion of two months training. Such certificates are issued to ventures after verification and recommendation by P.D., ATMA, Programme Coordinator of KVK or head of nearest research station of State Agriculture University, ICAR institute. This certificate entitles the agripreneurs to be recognized by the development Departments in supplementing the efforts of public extension services.

I.2.7: Credit Supports:-

The assistance under ACABC Scheme is purely linked with credit and is subject to sanction of the project by banks based on economic viability and commercial considerations. The eligible financial institutions under the ACABC Scheme are commercial banks, Regional Rural Banks, State Cooperative Banks, State Cooperative Agriculture and Rural Development Banks and other Institutions eligible for refinance from NABARD.

I.2.8: Security:-

As most of the eligible activities pertain to agricultural input supply and services and the cost of investment is less than Rs. 25 lakh in most of the cases, the security norms applicable to tiny industries as prescribed in RBI circulars dated 31.2.2000 are made applicable to these units. Accordingly, up to the loan amount of Rs. 5 lakh, the loans can be secured against hypothecation of assets created and no further security is necessary.

I.2.9: Subsidy:-

In the pre-revised ACABC Scheme, subsidy was admissible in respect of agriculture graduates trained under ACABC Scheme on or after April 1, 2004, for fresh investments made after July 9, 2006. The candidates trained under this scheme prior to April 1, 2004 who have made investments after July 9, 2006, were to be considered on a case by case basis. Subject to fulfillment of all other eligibility conditions under the scheme, a committee headed by Director General (DG), MANAGE used to take a decision in such matters. However, very few such cases have been received in MANAGE since it was set-up mainly due to ignorance among candidates and financing institutions and distance of MANAGE from their place of operation. As agreed in Review Meeting on 9-10-2010 all trained under the scheme are eligible for subsidy.

I.3: Growth under ACABC Scheme in Uttar Pradesh during 2002-2003 to 2015 -2016

The success of ACABC Scheme is directly proportional to the success of the agripreneurs and the farmers, because the key objective of ACABC scheme is to provide accountable agricultural extension services to the needy farmers on payment basis. The agri-clinics and agri-business centres, thus, established will survive and succeed only when these will perform well to provide the useful and relevant agricultural extension services to the needy farmers of the country.

The distribution of district-wise number of agri-ventures established in the state of Uttar Pradesh during 2002-03 to 2015-16 worked-out in TableI-1 indicates that the scheme of ACABC was started in the year 2002-03 wherein only 9 agri-ventures were reported to be established in the whole State of Uttar Pradesh. Thereafter, the number of Agri-ventures established successfully increased from 55 in the year 2003-04 to 352 till the year 2006-07 continuously. But, onward 2006-07 the number of Agri-Ventures established under ACABC Scheme decreased tremendously to 211 till the year 2010-11. Thus, from the years 2006-07 to 2010-11 were the lean years for the progress of ACABC scheme in the State of Uttar Pradesh, while, since, the year 2011-12 the number of agri-ventures increased very sharply from 534 to 722 till the year 2015-16 aggregating 4886 agri-ventures in the State of U.P. as a whole. Thus, the years from 2011-12 to 2015-16 were the leap years for the progress of ACABC scheme in Uttar Pradesh wherein the growth of Agri-ventures under ACABC scheme was tremendous till the year 2015-16 in the State of Uttar Pradesh.

The district-wise distribution of agri-ventures established successfully during the years 2002-03 to 2015-16 worked-out in Table-I-1 shows that out of the total 4886 agri-ventures established so far on an aggregate the maximum i.e. 327 agri-ventures were established successfully in Varanasi district, followed by 302 agri-ventures in Bareilly district and 269 agri-ventures in Azamgarh district till 2015-16 in the whole of Uttar Pradesh. Amethi district is such a single district out of the total 75 districts across the State of U.P. wherein not a single agri-venture has been established so far till the year 2015-16. Also there are five such districts where in the number of agri-ventures established so far has been reported in single digit of 4 to 9 only till the year 2015-16. Such districts are namely Gautam Bodh Nagar with only 4 agri-ventures, Kasganj with 6, Chitrakut with 7, Kaushambi with 8 and Sambhal with 9 agri-ventures. Thus, these 6 districts were the districts where in the growth of ACABC scheme has been reported as negligible till the year 2015-16 in the whole of the State of Uttar Pradesh, while, there are 54 such districts in the whole of the State of Uttar Pradesh, wherein the number of Agri- ventures so far established till the year 2015-16 has been reported in double digits from 10 to 97 across the state.

In the remaining 15 districts the number of successfully established agri-ventures has been reported to be in triple digits from 101 agri-ventures established in Ballia district to 327 agri-

ventures so far in Varanasi district. Thus, the growth in ACABC Scheme in the State of Uttar Pradesh, since, its inception till the year 2015-16 so far has been found to be satisfactory as compared to that in the other States across the country. In the latest years it has caught the pace as the number of agri-ventures has increased sharply in the State as a whole. The numbers are worked out in Table-I-1.

Table-1-1
District wise Number of Ventures Established during 2002-2003 to 2015 -2016 in Uttar Pradesh

Sl. No.	Districts of Uttar Pradesh	No. of Ventures Established during 2002-2003 to 2015 -2016														Total
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
1	SAHARANPUR	0	0	1	0	3	1	4	2	0	5	17	7	11	20	71
2	MUZAFFARNAGAR	1	1	2	4	7	6	1	4	5	11	15	18	32	32	139
3	SHAMLI	0	0	0	0	0	0	0	0	0	0	0	6	3	10	19
4	MEERUT	0	0	2	15	3	2	0	2	1	4	24	17	13	19	102
5	BAGPAT	0	1	0	4	5	0	1	3	1	0	4	5	3	0	27
6	B.SHAHAR	0	0	1	3	5	2	7	10	5	11	5	12	16	19	96
7	GHAZIABAD	1	0	0	5	0	1	1	0	5	6	12	0	1	0	32
8	G.BUDDHA NGR.	0	0	0	0	0	0	0	0	1	0	1	0	1	1	4
9	HAPUR	0	0	0	0	0	0	0	0	0	0	0	3	5	6	14
10	ALIGARH	0	4	1	8	6	4	0	1	2	16	13	20	11	26	112
11	HATHRAS	0	0	2	3	3	3	1	1	0	3	5	6	13	15	55
12	ETAH	0	0	0	4	0	3	2	1	0	4	4	2	3	9	32
13	KASHGANJ	0	0	0	0	0	0	0	0	0	0	0	2	0	4	6
14	AGRA	2	0	1	4	6	4	1	1	1	13	20	28	11	43	135
15	MATHURA	0	0	0	2	0	2	1	0	1	4	6	3	1	7	27
16	FIROZABAD	0	1	0	6	2	2	0	1	0	0	4	6	2	12	36
17	MAINPURI	0	0	0	2	0	2	2	1	0	4	0	4	0	9	24
18	BAREILLY	0	0	1	8	8	6	7	6	3	14	40	81	74	54	302
19	BUDAUN	0	1	0	0	0	1	2	9	1	4	1	13	15	0	47
20	SHAHJAHANPUR	0	0	2	1	2	0	0	3	1	2	3	7	6	5	32
21	PILIBHIT	0	0	2	3	2	3	6	9	4	9	25	33	23	10	129
22	BIJNOR	0	0	0	2	6	4	1	0	8	17	19	24	27	13	121
23	MORADABAD	0	0	1	2	4	3	6	2	19	21	35	56	34	34	217
24	AMROHA	0	0	1	1	0	0	0	2	16	49	38	33	19	11	170
25	RAMPUR	0	1	1	0	1	0	2	3	3	6	16	26	26	8	93
26	SAMBAL	0	0	0	0	0	0	0	0	0	0	0	2	6	1	9
27	FARRUKHABAD	0	0	0	1	0	0	1	2	0	1	0	3	1	1	10
28	KANNAUJ	0	0	1	1	1	2	2	0	0	1	2	7	0	2	19
29	ETAWAH	1	0	1	5	0	1	2	0	1	8	3	10	3	11	46
30	AURAIYA	0	0	0	3	3	2	1	1	4	2	5	0	1	2	24
31	ALLAHABAD	0	0	2	7	1	7	7	6	1	3	2	1	2	6	45
32	KAUSHAMBI	0	0	0	0	0	1	0	0	0	0	0	0	1	6	8
33	PRATAPGARH	0	1	1	1	3	4	1	10	2	12	4	4	1	7	51
34	VARANASI	0	30	36	42	29	20	11	25	13	22	23	41	13	22	327
35	CHANDAULI	0	0	12	13	3	3	5	4	1	3	2	2	2	5	55
36	GHAZIPUR	0	0	7	22	28	14	19	18	5	16	10	0	2	4	145
37	JAUNPUR	0	1	6	10	19	18	21	21	10	20	8	6	20	22	182

38	MIRZPUR	0	0	5	6	7	4	12	10	6	8	12	12	7	8	97
39	SONBHADRA	0	0	1	0	0	0	0	3	1	0	0	2	2	1	10
40	S. RAVI DAS NGR	0	0	4	3	3	0	1	1	3	2	4	5	0	3	29
41	AZAMGARH	0	0	1	23	40	23	39	39	15	15	20	22	23	9	269
42	MAU	0	0	3	7	7	8	16	4	4	6	5	0	9	12	81
43	BALLIA	0	1	2	10	1	7	14	7	1	5	15	1	5	4	73
44	GORAKHPUR	0	0	0	8	16	4	10	2	2	8	10	0	6	35	101
45	MAHRAJGANJ	0	0	0	2	5	1	2	0	0	6	2	1	3	1	23
46	DEORIA	0	2	0	9	10	10	9	10	5	10	1	2	6	1	75
47	KUSHI NAGAR	0	0	0	2	14	10	8	4	2	11	3	5	7	10	76
48	BASTI	0	1	1	3	4	7	1	3	3	17	15	0	5	18	78
49	SIDDHARTH NAGAR	0	1	0	1	4	3	1	0	0	1	0	0	0	2	13
50	SANT KABIR NGR	0	0	0	2	6	3	2	2	0	3	0	0	2	4	24
51	FAIZABAD	0	0	0	1	7	1	0	5	1	4	3	1	4	15	42
52	AMBEDKAR NAGAR	0	0	0	5	7	10	8	7	6	9	3	3	4	4	66
53	SULTANPUR	0	2	0	13	12	7	12	11	8	13	21	6	7	24	136
54	AMETHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	GONDA	0	0	0	4	2	2	6	9	5	15	15	7	6	21	92
56	BALRAMPUR	0	0	0	0	1	2	0	0	0	4	1	1	1	4	14
57	BAHRAICH	0	0	0	6	0	0	3	1	1	4	10	1	3	7	36
58	SHRAVASTI	0	0	0	4	0	0	1	4	0	7	2	0	3	1	22
59	BARABANKI	0	0	0	0	3	3	1	2	4	4	0	4	6	11	38
60	LUCKNOW	0	1	8	20	19	4	2	3	1	3	0	3	0	13	77
61	UNNAO	0	0	0	0	0	0	0	1	1	2	2	2	2	2	12
62	RAEBARELI	0	0	0	2	3	4	6	5	5	6	2	1	1	5	40
63	SITAPUR	0	0	0	5	4	1	2	0	2	5	2	3	9	0	33
64	HARDOI	0	0	2	4	8	3	4	5	1	5	1	3	1	4	41
65	KHERI	0	0	0	4	3	1	3	5	4	15	5	4	15	20	79
66	FATEHPUR	0	0	0	1	0	1	1	4	2	0	0	0	1	7	17
67	KANPUR CITY	0	1	2	0	1	2	1	0	2	1	1	1	0	2	14
68	KANPUR DEHAT	0	1	0	1	2	3	2	1	2	3	1	1	0	1	18
69	JHANSI	2	2	2	2	3	2	2	3	1	17	18	1	1	3	59
70	LALITPUR	0	0	0	2	0	1	0	1	0	2	6	1	0	5	18
71	JALAUN	2	1	1	1	3	0	0	1	1	14	17	1	0	2	44
72	HAMIRPUR	0	1	1	5	5	1	0	2	4	4	4	0	1	4	32
73	MAHOBA	0	0	0	0	2	0	0	1	1	4	6	0	0	2	16
74	BANDA	0	0	0	0	0	2	0	2	3	9	4	1	0	0	21
75	CHITRAKUT	0	0	0	0	0	1	1	1	0	1	1	0	1	1	7
Total	All Districts	9	55	117	338	352	252	285	307	211	534	578	583	543	722	4886

I.4:- Contributions of ACABC Scheme in Agricultural Extension Services to the Farmers of the Country

Prima-facie, the main contributions of ACABC Scheme to the farmers of the country, through the agricultural extension services provided by successfully established agri-ventures have been reported as well as observed as follows:-

1. This unique and flagship ACABC Scheme has been implemented in almost all the 29 States across the country and agri-ventures related to 32 categories of agriculture and allied

agriculture sectors have been established. It has been observed that Southern and Western states have shown encouraging performance in terms of establishing agri-ventures.

2. The ACABC Scheme has really created double impacts in terms of generating employment across the country. On one hand the ACABC scheme has created direct impact on teaming unemployed agricultural graduates by providing them free-training and thereafter, self employment through successfully establishing their agri-ventures. On the other hand, these agri-ventures have generated employment to many individuals and inputs industries as well as marketing agencies across the country.

3. It has been found that every year about 15000 agriculture graduates pass out from the agriculture universities and colleges. Out of these, agriculture graduates about 23 per cent undertake the training under ACABC scheme through the 108 nodal institutes established by MANAGE across the country.

4. Apart from the employment generated by agri-entrepreneurs associated with the ACABC Scheme, considerable employment has also been generated by the agri-ventures successfully established through nodal institutes under the ACABC Scheme across the country.

5. The prime benefit derived by the farmers from the agricultural extension services provided to them by the successfully established agri-ventures under ACABC scheme was the increased productivity of crops and animals and in return considerable increase in their income as observed during the survey. Thus, there was the desired impact of agricultural extension services by imparting technical knowledge to the farmers both in terms of the increased productivity and income across the country.

6. Since, agri-clinics and agri-business centres provide advisory services accompanied by inputs supplies the revenues are readily generated without any gestation period. Hence, these agri-clinics and agri-business centres are more popular because of low investment and low risk.

7. Owing to few innovative agricultural extension services included under the ACABC Scheme like agri-journalism, eco-tourism, agri-insurance, seri-culture and pisci-culture etc., the scheme of ACABC has facilitated more opportunities available and reluctance on the part of bankers to fund innovative extension services in the agriculturally prosperous areas.

8. It has also been found that nodal institutes have succeeded mainly due to the practical training, they impart to the trainees through the industry experts alongwith the experienced academicians from the stakeholders such as S.A. Us, K.V.Ks, agriculture college, state department of agriculture, I.C.A.R. complexes ATMA and State farms etc. and officers of banks who make the processing of loans easier to these trainees.

9. Under the hand holding process, the nodal Institutes guide the trainees for which an amount of Rs. 5000/- is provided for the entire hand holding process which usually continues for one year. The funds provided for the purpose of training include food and lodging charges.

10. The agri-clinics and agri-business centres have been able to add value and strengthen the extension efforts of the state governments. These ACABCs equipped with advanced technological knowledge and input supplies have increased the access of farmers to better farming and increased productivity.

11. ACABC scheme through nodal institutes exposes the trainees into potential agri-ventures in their area providing additional subject matter training to refresh their knowledge and skills and facilitate the trainees to choose a venture and to prepare DPR based on the market survey, hands on experience with the support of experienced bankers.

I.5. About the MANAGE, Nodal Institutes Agri-Ventures and Agri-Entrepreneurs

I.5.1:- MANAGE

MANAGE was established in 1987 as the National Centre for Management of Agricultural Extension Hyderabad, by the Ministry of Agriculture and Farmers Welfare, Government of India as an autonomous institute from which its acronym “MANAGE” is derived. In recognition of its importance and expansion of activities over the country, its status was elevated to that of National Institute in 1992 and re-christened present name i.e., National Institute of Agricultural Extension Management. MANAGE is the Indian response to the challenges of agricultural extension in a rapidly growing and diverse agriculture sector. The poly -liberalization and globalization of the economy and the level of agricultural technology becoming sophisticated and complex, called for major initiatives towards reorientation and modernization of agricultural extension system. Effective ways of managing the extension system needed to be evolved

extension organization enabled to transform the existing set-up through professional guidance and tricultural manpower. MANAGE is the response to this imperative need.

The aim at the institute (MANAGE) is to instill managerial and technical skills to extension officers. Managers, scientists and Administrators in the agricultural economy, to enable them to provide support and services to farmers and fisherman for practicing sustainable agriculture. In order to effectively implement and monitor AC and ABC Scheme, a separate Centre called centre of Agri -Entrepreneurship Development (CAD) has been functioning at MANAGE from October, 2009. In order to give further boost to the ACABC Scheme and to improve quality and quantity of the training programmes, handholding activities, resolving problems of agri-entrepreneurs etc. an exclusive centre has been established.

The centre is headed by the director and assisted by six consultants to look-after five geographic area of the country for effective implementation and monitoring of the scheme.

CAD is responsible for the following tasks:

General awareness, publicity, coordination and over all implementation and monitoring of the scheme liaison with NABARD, BANKS State and Central Govt. Agencies in Scheme implementation, selection of candidates for Training Selection of Nodal Training Institutes, Monitoring of the Training programmes during and after the training. Guiding the Nodal Institutes in handholding, funding of training and handholding activities, documenting the success stories, taking measures for replicating the success modals.

I.5.2:- Nodal Institutes

Skill Development of Rural Youth is a flagship scheme of the government. The Ministry of Agriculture and Farmers Welfare, Govt. of India, in compliance with National Policy on Skill Development and Entrepreneurship has taken the initiative to implement the skill Development component, namely skill training of Rural Youth (STRY) and Farmers Capacity Assessment and Certification (FCAC) under sub-mission on Agricultural Extension (SAME) of National Mission on Agricultural Extension and Technology (NMAET) during 2015-16 and remaining period of VII plan.

Press advertisement inviting application from eligible Institutions issued once in a year, so that selection of NTIs can be done in a time bound manner. However, additional applications may be taken during the year, if deemed necessary after initial scrutiny of applications (received in the format provided) by MANAGE, eligible Institutions shall be visited by team comprising Director, CAD, MANAGE or any other Director nominated by the Director General, representative of ATMA, Department of Agriculture at the state level, Zilla Parishad chairman or a member of Zilla Parishad representing the chairman. Lead Bank and NABARD. Director, MANAGE will be the chairman of the team. A quorum of three members will suffice. Recommended Institutions shall make a presentation before a panel of MANAGE faculty, Representative of NABARD, Directors of Department of Agriculture of State concerned, ICAR Zonal Project Director (or his nominee) and DAC representative. Selection of NTIs shall be based on the criteria given by MANAGE. In order to encourage submission of applications by organizations willing to be selected as NTIs without personally visiting MANAGE, a mechanism for submitting applications online will be made in the website.

Eligibility Criteria for NTIS:

Institutes from public and private sectors with following credentials are eligible for considering them as Nodal Training Institutes (NTIs) under the scheme:-

- (i) At least one year experience in organizing training programme and implementation of central and state Government Schemes related to Agri-Entrepreneurship Development.
- (ii) Either own or leased (on long-term basis) lodging, boarding and transport facilities for Minimum of 35 candidates.
- (iii) Availability of training infrastructure (building, teaching aid including PC and LCD Projects, resource persons etc.)
- (iv) Nodal officer, with degree in agriculture and allied disciplines and having at least 3 years experience in Agri-entrepreneurship development.
- (v) Private firm must have an annual turnover of minimum of Rs. 5 lakh for the last 3 years.

MANAGE shall invariably inform DAC about any selection process being undertaken, so that wherever deemed necessary its representative can attend as an observer.

At the time of signing Agreement with MANAGE, Institutes from the private or non-government sectors will give a Bank Guarantee for an amount of Rs. 2.5 lakh so as to ensure expenditure as per norm during training and proper hand-holding after the training. All the NTIs shall install web cameras in the class-rooms for use by any of the monitoring agencies.

I.5.3:- Agri-Ventures:-

In order to strengthen the Extension services provided to the farmers and at the same time tap the potential of unemployed Agriculture Graduates to provide them with employment opportunities by making them Agri-preneurs the Scheme was launched by GOI on 9th April 2002 to supplement the efforts of public extension system in the country with the following objectives such as:-

(i). Proving extension and other services to farmers on payment basis (s) Supplementing Agriculture Development and Entrepreneurship (3) Promotion of self employment in agriculture sector.

Implementing Agencies

National Institute of Agricultural Extension Management (MANAGE), an apex level institute of GOI is the overall implementing agency for training component and imparting two months training to the agriculture graduates through selected Nodal Training Institutes (NTIs) across the country. National Banks for Agriculture and Rural Development (NABARD) is Nodal Institute for banks who is responsible for monitoring the credit support to Agri-clinics through commercial banks and is also responsible for extending refinance support to the banks under the scheme of ACABC.

Guidelines

1. MANAGE selects and appoints Nodal Training Institutes (NTIs) based on criteria for conducting the training and execution/implementation of the scheme.
2. Any unemployed graduate in agriculture and allied areas is eligible to apply (age is no bar). Only selected candidates are provided two months training free of cost keeping in view the agri-business aspect, market survey etc. NTIs also facilitate the trained graduate in preparation of a project they intend to take up.

3. The NTIs are provided with the handholding support for assisting the trained agriculture graduates up-to one year in getting the loan sanctioned from commercial banks and execution of the project agri-venture.

I.5.4:- Agri-Entrepreneurs:

In order to effectively implement and monitor AC and ABC scheme, a separate centre called centre of agri-entrepreneurship Development (CAD) has been functioning at MANAGE from October, 2009. In order to give further boost to the scheme and to improve quality and quantity of the Training programmes, handholding activities, resolving problems of Agri- Entrepreneurs etc., an executive Centre has been established.

The Centre is headed by the Director and assisted by six consultants to look after five geographic areas of the country for effective implementation and monitoring of the scheme. CAD is responsible for the following tasks:-

General awareness, publicity, coordination and over all implementation and monitoring of the scheme liaison with NABARD, BANKs State and Central Govt. Agencies in scheme implementation selection of Nodal Training Institute selection of Candidates for Training Monitoring of the Training Institutes selection of candidates for training monitoring of the training programmes during and after the Training, Guiding, the Nodal Institute in Handholding process. Funding of training and handholding activities, documenting the success stories, taking measures for replicating the success models.

Thus, agri-entrepreneurs are the ultimate beneficiaries of the AC & ABC scheme. They are agriculture graduates, postgraduates and even doctorates who undertake training under the AC & ABC scheme and provide specialized agricultural extension services and other services on fee for service basis and to supplement the efforts of public extension services by providing economically viable enterprises in self –employment mode. Agri-entrepreneurs get support by the input industries for creating regular sources of income.

I.6:- Need and Scope of the Study

I.6.1:- Need of the Study:-

Agriculture is still the main source of livelihood to about two thirds of its work force in India, wherein nearly 75 per cent of the total population is dependent directly or indirectly on agriculture being important economic sector accounting for 25 per cent of the GDP (Gross Domestic Product). Thus, agriculture now-a-days is not only the means of solving the food problems of the country but also as an earner of foreign exchange too. Onward independence in India, agricultural extension services to farmers still need ample information, training and support for adopting improved production technologies. Because agricultural extension services through-out the country are suffering from acute inadequate quality and quantity of skilled manpower. Quantitatively the current farmers to extension worker ratio has been worked-out as 1000:1 which means that for every 1000 farmers there is only 1 extension worker in the country. Under such circumstances it becomes really extremely difficult for an extension worker to provide quality agricultural extension services to the teeming and large number of farmers and as a result, the quality time of an agricultural extension worker available to each farmer becomes indeed minimum and inadequate. Apart from it, only about 20 per cent of the agricultural extension workers are qualified agriculture graduates and the rest of the agri-cultural extension workers become quite unable and incapable to explain the complex issues of agriculture as well as business to the farmers. Moreover, large numbers of extension gaps have been absorbed in the transfer of technology processes across the country. Therefore, to provide value added agricultural extension services to the teeming farmers by the additional qualified and skilled manpower and adequate infrastructure is an urgent need of the hour.

In order to strengthen the agricultural extension services being provided to the farmers as well as to tap the potential of huge unemployed agriculture graduates and to provide them employment opportunities by making them entrepreneurs, the Union Finance Minister had announced a scheme for setting-up “**Agri-Clinics and Agri-Business Centres**” by agriculture graduates with the support of National Bank for Agriculture and Rural Development(NABARD) in the budget speech on February 28, 2001 for the year 2001-02. Accordingly the scheme of “Agri-Clinics and Agri-Business Centres” was launched on 9th April, 2002 to strengthen the transfer of technology

and agricultural extension services and also to provide self employment opportunities to the technically trained persons.

So far as the extension approach is concerned, it was production oriented support with inputs and infrastructure rather than demand driven through cost competition, quality and market reach. As a result, large extension gaps were observed in transfer of technology process. Therefore, providing value added agricultural extension services to farmers through additional qualified manpower and adequate infrastructure was barely needed. To fulfill this bare need, the Ministry of Agriculture and Farmers Welfare, Government of India in association with NABARD has launched this unique scheme for better methods of farming the each and every farmer across the country.

Keeping this need in view the Directorate of extension, Department of Agriculture, Ministry of Agriculture and Farmers Welfare desired the present study entitled **“Impact study on Agricultural Extension Services to Farmers by Agri-clinics and Agri-Business Centres (ACABC scheme)”** to be conducted by AERCs at the instance of the Ministry of Agriculture and Farmers Welfare, Government of India under the Work-Plan 2016-17

I.6.2:-Scope of the Study

The National Development council had envisaged an overall growth rate of 10 percent during the 11th Five Year Plan. To achieve this target, agriculture had to be geared-up to attain a growth rate of 4.1 per cent. The projections were to be achieved by increased production through improved resource efficiency, new technologies and better farming practices. But it has been observed that the available technologies have not been adopted efficiently and effectively. Therefore, the implementation of the scheme of Agri-clinics and Agri-Business centres is expected to play an important role in achieving the objectives of this unique scheme. The main objectives of the ACABC schemes are (1) To provide extension and other services to the farmers on payment basis, (2) To support agricultural development and entrepreneurship and (3) To promote self-employment. The concept of Agri-Clinics is that Agri-Clinics are envisaged to provide expert advice and services to farmers on technology, cropping practices, protection from pests and diseases, market trends, prices of various crops in the markets and also clinical services for animal health etc. which would enhance productivity of crops as well as animals and to increase

income to farmers. While the concept of Agri-Business Centres is that Agri-Business Centres are envisaged to provide farm machines and implements on hire, sale of inputs and other services. MANAGE will be responsible for providing free training to eligible candidates through its nodal institutes and motivate them for setting-up Agri-Clinics and Agri-Business Centres. MANAGE will also ensure sponsoring of sufficient number of cases to the participating banks for financing under the ACABC scheme and arrange to establish required number of units at the ground level, as envisaged to make this scheme a success.

In order to make the established agri-ventures deliver the desired results, various entities associated with ACABC scheme will have to play a significant role in the empowerment of agripreneurs. Those completing the training can apply for special start-up loans for venture.

Hence the present study entitled **“Impact Study on Agricultural Extension Services to Farmers By Agri-Clinics & Agri-Business Centres (ACABCs Scheme) in Uttar Pradesh”**, conducted at the instance of the Ministry of Agriculture and Farmers Welfare, Government of India by the Agro-Economic Research Centre, University of Allahabad , Allahabad as an all India Coordinator will be of paramount importance to the Ministry of Agriculture and Farmers Welfare, and all others who are concerned with the increased productivity of crops and animals across the country. This study was conducted with the following main objectives:-

I.7.: Main Objectives of the Study:

1. To identify the benefits accrued to farmers through extension services by ACABCs.
2. To analyse comparative effectiveness of extension services to Beneficiary farmers by ACABCs and non-beneficiary farmers of the same area.
3. To assess the extent of effects on income of beneficiary farmers through extension services by ACABCs and the income of non-beneficiary farmers.
4. To examine the problems / factors hampering the effects of extension services on farmers by ACABCs.
5. To explore measures and suggestions for strengthening extension services by ACABCs more effective to farmers.
6. To suggest changes in imparting extension services to farmers under the ACABCs Scheme.

1.8.: Organization of the Report.

Chapter-1:- Introduction

- I.1. Statements of the Problem under study
- I.2. Concepts of Agri-Clinics and Agri. Business Centres.
- I.3. Growth in ACABC Scheme (2002-2016)
- I.4. Contribution of ACABC Scheme in Agricultural Extension Services to the Farmers of the Country.
- I.5. About the MANAGE Nodal Training Institutes (NTIs), Agri. Ventures and Agri. Entrepreneurs
- I.6. Need and Scope of the Study.
- I.7. Objectives of the Study
- I.8. Organization of the Report

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- III.1. Profile of the State
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- III.5. ACABC Scheme at a glance in the State.
- III.6. Trend of Growth in ACABC Scheme since inception in the State (2002-2016)
- III.7. All other relevant latest information relating to ACABC Scheme in the State.

Chapter-IV:- Method and Procedures of the Study

- IV.1. Method of Study
- IV.2. Sampling Design
 - IV.2 (a) Selection of States/Districts
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- IV.3. Method of Investigation and Survey of the Area under Study
- IV.4. Method of Analysis of Data
- IV.5. Reference Period of the Study
- IV.6. Table of Sampling Design

Chapter-V:- Result and Discussion

Chapter-VI:- Summary of Main Finding, Conclusion and Policy Implication

CHAPTER-II

Review of Literature

The present chapter mainly deals with the review of available literature concerning the research study entitled “**Impact study on Agricultural Extension Services to Farmers by Agri-Clinics and Agri-Business Centres (ACABC scheme) in Uttar Pradesh**”. The available concerned literature collected after consulting various reputed journals on agricultural Extension of the country and abroad, reports, bulletins, magazines, periodicals, success stories and Ph.D. theses on the concerned subjects from various S.A.U.s (State Agriculture Universities) I.C.A.R. complexes, agriculture colleges, MANAGE, NABARD and many other reputed Agricultural Institutions are being highlighted in the following paragraphs in chronological order of the connected past works conducted.

1. **Karjagi Rajashekhar, et.al.** (2006), reported that majority of agripreneurs (41%) had under-taken project of rural marketing dealership of farm inputs and outputs. All the projects were found to be financially feasible and economically viable. Karnataka was highest in both number of units financed and amount of loans disbursed. All the commercial banks were being followed by the strategies governed by the RBI. High rate of Sanction was the main suggestion by agripreneurs. Although, most of the trainees were not successful in starting their ACABCs.

2. **Ayyappan, S.et.al** (2007) in their research paper reported that ACABC Scheme for agri-graduates has resulted in setting-up of nearly 782 units. The ACABC scheme has facilitated in extension support through agri-graduates on commercial basis and helped farmers in getting services and technology transfer, besides employment generation for agri-graduates.

3. **Karjagi Rajashekhar, et.al.** (2009), in their research paper have found that high rate of interest, lack of subsidy component and lack of handholding support from the training institutes were the major problems faced by the agripreneurs in establishing their agri-

ventures, whereas, heavy competition from the well established dealers, non-cooperation of the farmers in repaying the credits and insufficient cash in hand while starting the business were the other major problems. The main suggestions of agripreneurs includes linking the financial institutions with the training institutions, banks should follow the guidelines of RBI and private agri-clinics should be treated at par with the Govt. agri-clinics particularly in distribution of seeds and other inputs on subsidy basis.

4. Global Agri-System PVT. Ltd (2010) in its ACABC scheme evaluation study conducted a survey within the sample size which gave us an insight of the implementation of the ACABC scheme at different levels wherein the following key observations were made:-

Key Observations:-

1. The scheme has been implemented in 23 states across the country and ventures have been established in 35 categories related to agriculture and allied sector. It was observed that various states have different success rates in implementing the scheme. States in Northern and Southern regions have very encouraging record while states in North Eastern regions have shown poor performance in terms of setting-up of ventures.
2. Some project categories have made popularity as compared to others Projects like ACABC, dairy, vermi-composting and crop production are amongst the most popular projects. The popularity of the agri-clinics projects is mainly because of low investment and low risk. Since, it is an advisory service accompanied by input supply, the ventures are readily generated without any gestation period. Regional analysis shows that ACABC has been taken up mostly in the North region accounting for 34% of the total ACABC in the sample size.
3. Some innovative projects like eco-tourism, agri-journalism, agri-insurance and sericulture have also been set-up under the scheme. However, mainly due to less awareness amongst the trainees about the new opportunities available and reluctance on parts of bankers to fund innovative projects, their numbers have been negligible.

4. On an overall perspective, south and north zones have fared better in establishing ventures and north east zones have not been able to implement the scheme successfully, largely because of the lack of bank funding in the region.
5. It has been observed that key factors for the success of agripreneurs have been the marketability of their projects, the fact that they provide single window solutions to the farmers, maintaining good relations with the farmers, quality assurance and reliable information to the farmers.
6. The nodal institutes voiced that the reason for their success was primarily the practical training that they impart to the students. In fact they invite industry experts for delivering lectures in their institutes and liaising with banks that makes processing of loans easier.
7. Every year about 15000 graduates pass out from the agriculture universities and colleges. Out of these graduates about 23% undertake the training every year.
8. The ACABC scheme has created dual impact in terms of generating employment in the country. Direct impact has been created by the scheme by providing self employment to the agri-graduates through setting- up of the ventures. These ventures in turn have generated employment for others.
9. Out of approximately 75000 agri-graduates (15000 per year) qualified from various SAUs & colleges during the period of implementation of the scheme (2002-2003 to 2006-2007), the scheme has been able to provide employment to 4152 graduates. It accounts for 6% of the total unemployed agri -graduates. This indicates that the scheme requires more aggressive sensitization and removal of possible hindrances to bring more graduates to take benefit of the scheme.
10. In addition to the agripreneurs, employment has also been created by the ventures set- up under the scheme. The sample size of 250 ventures indicates that 1535 persons have directly or indirectly been provided employment under various categories. Based on this average total employment created by 4152 ventures would be in the range of more than 25000.

5. Ratnoo, A.D. (2010), in his study in Mandi district of H.P.(Himachal Pradesh) reported that out of the 32 units financed under ACABC scheme, 20 units were included in the samples. The units were categorized into five broad heads i.e. Agri -Business Units (Sale of fertilizers, insecticides, pesticides, seeds etc.), tractors, poultry units, dairy units and poly-houses. Further, 5 farmers per agri-preneur were contacted and their views on need and benefits were elicited. The study revealed that agri-preneurs were able to attract farmers due to good quality inputs, expert advice and free consultancy services. All the ventures were found to be financially viable. However, the sensitivity analysis indicated that except agri-business units, all other units slipped to non-viable status. This shows that the units are surviving on narrow profit margins. The farmers have received very little support in improving the marketing of their produce which needs to be enhanced by providing better market information to the farmers.

6. Bairwa, Shojilal, et.al (2014), in their research paper reported that although, agri-clinics and agri-business centres scheme now become popular among agri-graduates due to specialized training, credit facility, subsidy and hand holding support for the establishment of agri-business/agri-ventures, but the success rate of total agri-venture establishment is low against the total training candidates in the country. The success rate is 37 per cent against 30977 trained candidates including male and female candidates. There is need to rethink on the components of scheme such as training programme, nodal training institutes, credit assistance, subsidy and monitoring of scheme for success. The objective of scheme has been met to some extent, yet there is need to involve private extension staff and agri business experts to improve the performance of the scheme. The study revealed that Maharashtra, Tamil Nadu, Uttar Pradesh, Bihar and Karnataka were the leading states. Dairy/Poultry/Piggery farms under projects were given more emphasis. The agri-graduates engaged in agri-business should receive regular support and guidance from agriculture department, MANAGE and NABARD for the improvement of ACABC Scheme. There is need of a state level coordination committee between MANAGE and Nodal training institutes to ensure smooth implementation, monitoring and evaluation of training programme under the scheme.

7. **Chandra Shekara S. et.al (2014)** reported that study on effectiveness of paid extension services provided useful insights into the four components that make-up the effectiveness index. While extent of adoption was very high, the increase in yields was low and increase in profits was moderate. Yet the farmer's satisfaction was very high. The study also brought to light the felt needs of farmer for availability of appropriate agricultural technology provision of inputs and extension services locally. Generally, the input agencies are located in the cities and farmers are living in remote villages.

But agri-clinics and agri-business entrepreneurs are from the grass roots of the villages having their centres in remote villages. It is, therefore, concluded that they will better serve the needy farmers locally and timely. Doing so the cost of cultivation will be reduced to great extent and the level of income will be increased substantially. This will provide much satisfaction to both the farmers and agri-preneurs.

8. **Bairwa Shojilal, et.al (2015)**, in their research paper found that the agri-clinics and agri-business centres scheme is empowering to rural and urban youth by providing professional and technical skill for setting up their own agri-ventures and also helping the farming community by providing inputs timely. ACABC scheme become popular among agri-graduate due to specialized training, credit facility, subsidy and hand holding support for starting agri-business. The major problems were lack of own money to start business, lack of hand holding support from NTIs, lack of family support and experience, high rate of interest on loan, marketing and infrastructural problems, illiteracy and lack of knowledge of the farmers were the major problems in operating the agri-venture. There is a need that Government should make suitable policies for the problems faced by agri-preneurs under the ACABC scheme so that objectives of scheme can be achieved effectively and efficiently.

9. **Venkattakumar R., et.al. (2016)**, In their research paper have pointed out the need of awareness among the NTPs, changes in training approach and post-training supports to agri-preneurs. If these changes are properly envisioned and systematically implemented, the success rate of ACABC scheme is bound to increase considerably. It may also be worthwhile to substantiate the importance of this identified C.S.F. (Critical success factors) through field oriented case study and research with successful and not-so-successful agri-preneurs.

Some Success Stories of Agri-preneurs prepared and published by MANAGE Hyderabad:-

10. Parashar Rishi Ram (2009), in 2007, he joined the agri-preneurship development programme organized by Indian society of Agribusiness professionals (ISAP), Karnal, Haryana under the ACABC Scheme. He launched M/S Parashar Bee Farm in Karnal after training. In 2009, he produced 21 quintals of honey and sold it at the rate of Rs. 140/Kg. This translates into a net profit of Rs 80/Kg as the total cost to produce 1Kg of raw honey was Rs. 60/- It boosted his confidence and encouraged him to pursue Bee-keeping **“Says Sri Rishi Ram Parashar, a Bee Keeper and an Agriculture graduate, from Barna, district, Kurukshtra, Haryana”**. Prior to Bee-keeping he was a marketing executive in a pharmaceutical company for 15 years. During the training under the ACABC scheme he visited on Apiary in Karnal and was impressed by the activities and benefits of Bee-keeping. His further vision is to start an Api-therapy centre in his Bee Farm and to provide services for the betterment of mankind. He has, recruited eight full time skilled workers. The annual turnover of his firm has touched Rs 20 lakhs.

11. Madghe Prashant M. (2014), established his own venture and started Innova Agro-chemical in Paratwada taluka in the year, 2007. He is a graduate in agriculture and has completed agri-clinics and agri-business training in the first batch (2007-08) at Krishi Vigyan Kendra, Durgapur, (Badnera), Amaravati, Maharashtra. After his graduation in agriculture, he worked in Godrej Agro-vet Pvt. Ltd, as a senior sales officer for seven years (1998-2005). Later he decided to start his own venture. He appointed 25 rural youth and trained them to deliver extension services as **“Krishi Doot”** among orange growers to increase orange productivity and to involve rural youth in agriculture. Innova agrochemicals special focus is on Nutrient Management in orange cultivation. He provides consultancy to orange growers in the area of water, fertilizer pest and diseases management. He has high tech and modern agri-clinic and agri-business centre which provide agri-inputs, agro-consultancy and soil testing services. Impact of these extension initiatives resulted in increased quality, productivity and improved economic status of orange growers. The productivity increased from 9 to 10 Mt/ha. About 7000 farmers were benefited in Acholpur, Amaravati and Akola districts in Maharashtra. His turnover is more than 5 crores.

12. Somapur Shrishal (2014) He was inspired by ACABC scheme and underwent training at the Centre for Entrepreneurship Development (CED), Hyderabad. Later he resigned the job of Manager in Indo American Hybrid Seeds (India) Pvt. Ltd. in seed Production wing and started a seed production unit under the name “**Maxima Seeds for Better Future**” which is equipped with research and development facilities in 10 acre farm, processing and packaging facilities such as grader Gravity separator, De-stoner, Treator, automatic weighing and bagging unit with 90000 Sq.ft. storage facility on NH-7 at. Shadnagar, Mahboob Nagar district, Andhra Pradesh. He has provided employment to 30 skilled workers. Maxim seeds are extending services to 1000 farmers in 100 villages and have a turnover of 1.2 crores and a net profit of Rs. 20 lakhs.

13. Sawalakhe Ms. Sangeeta Deepak (2014), She completed post graduation in Agricultural Science and later underwent ACABC scheme training from Krishi Vigyan Kendra (KVK, Durgapur, Amarvathi, Maharashtra and started Vidarbha Biotech laboratory (VBL) in the year 2008. The Vidarbha Biotech Laboratory received 150-900/- 2008 certificate for the best quality products manufacturing and providing the marketing services. The organization also received “**Maharashtra Udyogina Puraskar Award**” from the Maharashtra State Government, UNESCO linked women’s wing Award for providing farmers services in the rural areas. She has provided employment to 30 women of 8 districts of Vidarbha region. The present sales turnover is Rs 70 lakhs and annual income of Rs 40 lakhs.

14. Dr. Kamal Brijesh (2014) Stressed that it is well known that excessive use of organo-phosphorous pesticides and chemical fertilizers, not only depletes soil fertility but also affects human health and nature’s eco-balance. Dr. Brijesh Kamal a Ph. D. in Mycology and Plant Pathology from Y.S. Parmar University of Hort. & Forestry, Solan (H.P.) established a plant clinic as Agri-preneur in Sirmour district (H.P.). He motivated the farmers for vermi-compost production and to avail subsidy at the rate of Rs. 30.000/- per pit. This attracted the farmers for producing more vermi-compost. He has employed 12 skilled and 30 unskilled employees. His annual turnover is Rs.180 lakhs with annual expenditures of Rs. 70 lakhs. Thus, his net profit is Rs. 10 lakhs per annum.

References

- *Ayyappan, S., Chandra Pitam, Tandon, S.K. and Srinivasan. N., (2007), “I.C.A.R. Industry Meet Agricultural Transformation through Public-Private Partnership: An Interface”, published in I.C.A.R., proceedings in March, 2007.**
- *Global Agri System Pvt. Ltd., (2010) Evaluation Study of Agri-Clinics & Agri-Business Centres Scheme, Global Agri system Pvt. Ltd., New Delhi, 2010.**
- *Ratnoo, A.D. (2010), “Evaluation Study of Agri-clinics and Agri-business Centres (ACABC) in Himachal Pradesh” published in Evaluation study series Himachal Pradesh R.O. No.5, NABARD, Himachal Pradesh, Regional Office, Shimla, 2010.**
- *Bairwa ShojiLal, Kushwaha, Saket, Meena Lokesh Kumar and Lakra, Kerobim (2014), “Present Status of Agri-clinics and Agri-business centres scheme in India: an Analysis”, published in International Journal of scientific Research and Management (IJSRM), Vol. (2), issue-9, 1431-1440, 2014, website, WWW.IJSRM. In ISSN (e):**
- *Chandra Shekara S., Bahab R and Bhagya Lakshmi K., (2014), “Effectiveness of Agri-clinics in Promoting Paid Extension Services among Farmers” published in International Journal of Extension Education, Vol. 10-27-33, 2014 ISSN: 2310-7188.**
- *Bairwa ShojiLal, Kushwaha Saket and Chandra Sen (2015), “Problems faced by Agri-preneurs in starting and operating agri-ventures under ACABCs scheme in Rajasthan State”, published in International Journal of Agricultural Science and Research (IJASR), Vol.5 issue.2, April, 2015, ISSN:2250-0057, ISSN (E):232/-0087.**

Some Success stories of Agripreneurs of MANAGE, Hyderabad:-

- *Parashar Rishi Ram (2014),” Bee-keeping to Api-therapy”** published in Agri-clinics and Agri-Business Centres: Success stories Agripreneurs, MANAGE, Hyderabad, Page 12, 2014.

- *Madghe Prashant M. (2014), “Krishi Doot in Extension Services”**, published in Agri-clinics and Agri-Business Centres: Success stories of Agripreneurs, MANAGE, Hyderabad page 36, 2014.

- *Somapur Shrishal (2014), “Sow Good Seed, Reap Good Harvest”** published in Agri-Clinics and Agri-Business Centres: Success stories of Agripreneurs, MANAGE, Hyderabad page 29, 2014.

- *Sawalakhe Ms. Sangeeta Deepak (2014), “Leading Lady of Organic Agriculture”**, published in Agri-Clinics and Agri-Business Centres: Success stories of Agripreneurs, MANAGE, Hyderabad page 64, 2014.

- *Karjagi Rajashekhar, Khan H.S.S., Vijay Kumar H.S., and Kunnal L.B. (2009)** “Problems of Trained Agri-preneurs under the Scheme Agri-Clinics and Agri-Agri-Business Centres in starting and running their Agri-Ventures- A study in South India,” published in *Karnataka Journal of Agricultural Sciences*. **22** (1): 233-234.
p
- *Karjagi Rajashekhar, Khan H.S.S., (2006),** “Economic Performance of Agri-Clinics and Agri-Business Centre in South India”, published in Krishikosh an Institutional Repository of Indian National Agricultural Research System Web. [http: Krishikosh eggranth.ac.in](http://Krishikosh.eggranth.ac.in), issue, 2006, publisher-UAS, Dharwad.

- *Venkattakumar R., Chandrashekara P. and Sontakki Bharat S. (2016)** “Critical Success Factor (CSF) for Agri-Clinics and Agri-Business Centre (ACABCs) Scheme in India”, published in Indian Research Journal of Extension-Education., 16 (1), January, 2016.

- *Dr. Kamal Brijesh (2014),** “Eco-friendly Agri-business Blooms in Himachal, published in Agri-clinics and Agri-Business Centres”: Success stories of Agri-preneurs, MANAGE, Hyderabad, Page, 37, 2014.

CHAPTER-III

General Description of the Area under Study and Status of ACABC Scheme therein

III.1 Profile of the State

III.1.1. Uttar Pradesh At –A Glance

Table-III-1
Uttar Pradesh At -A Glance

Sl.No.	Particulars	Years	Units	Figures/Data
1	Area	2011	Sq. KM.	243290
2	Population	2011	No. in (000)	199812
3	Male Population	2011	No. in (000)	104481
4	Female Population	2011	No. in (000)	95332
5	Rural Population	2011	No. in (000)	155317
6	Rural Male Population	2011	No. in (000)	81145
7	Rural Female Population	2011	No. in (000)	74172
8	Urban Population	2011	No. in (000)	44495
9	Urban Male Population	2011	No. in (000)	23566
10	Urban Female Population	2011	No. in (000)	20929
11	Density	2011	Per Sq.Km.	828
12	Sex Ratio	2011	Females per 000 Males	908
13	Tehsils	2011	No.	327
14	Development Blocks	2011	No.	822
15	Gram Panchayats	2011	No.	51914
16	Districts	2011	No.	75
17	Divisions	2011	No.	18
18	Literacy Total	2011	Percentage (%)	69.72
19	Literacy (Males)	2011	Percentage (%)	79.24
20	Literacy (Females)	2011	Percentage (%)	59.26
21	Junior Basic Schools	2001	No.	86,361
22	Senior Basic Schools	2001	No.	19,639
23	Higher Secondary Schools	2001	No.	8459
24	Degree colleges	2001	No.	406
25	Universities	2001	No.	27
26	Police Stations	2001	No.	1,366
27	Total Farmers	2001	In Percentage (%)	72.20
28	Total Workers	2001	In Percentage (%)	29.70
29	Lok Sabha Members	2001	No.	80
30	Rajya Sabha Members	2001	No.	33
31	Vidhan Sabha Members	2001	No.	404
32	Vidhan Parishad Members	2001	No.	100

Source: Statistical Abstract, U.P. 2012-2013

III.1.2:- Situation of U.P.

Uttar Pradesh garlanded by the Ganga and Yamuna, the two pious rivers of Indian Mythology, is a rainbow land which is surrounded by Bihar in the East, Madhya Pradesh in the south, Rajasthan, Delhi, Himachal Pradesh and Haryana in the West and Uttarakhand in the North and Nepal touch the northern international borders of Uttar Pradesh. Its area of 2,42,290 Sq. Km. lies between the latitudes of 24 degree to 31 degree north and the longitudes of 77 degree to 84 degree east. Uttar Pradesh is fifth largest state of India accounting 6.88 per cent of its total area. In sheer magnitude it is half of the area of France, three times of Portugal, four times of Ireland, seven times of Switzerland, 10 times of Belgium and a Little bigger than England. Rich and tranquil expanses of Meadows, perennial rivers, dense forests and fertile soil of Uttar Pradesh have contributed numerous golden chapters to the annals of the Indian History. U.P. plays important role in the politics, education, culture, industry, agriculture and tourism of India.

III.1.3:- Climate and Rainfall

The climate of Uttar Pradesh in general is sub-tropical monsoon type. The temperature in U.P. varies with altitude. The average minimum temperature in January, the coldest month ranges around 8°C in Saharanpur and Meerut area. The average maximum temperature in May the hottest month, ranges from 43°C in the southern and south-western parts to below 33°C in the northern part. The annual relative humidity varies from 30 to 40 per cent in U.P. Generally, humidity increases from the south-western part to the east or to the north. The annual evapotranspiration varies from 898 m.m. to 1617 m.m. in the whole state. As regards the rainfall in U.P., almost 90 per cent of the annual rainfall is received in four months from mid June to mid October and the rainfall becomes variable and erratic. It is, therefore, necessary to guard crops against the vagaries of monsoon, even in the months of rainy season. The average annual rainfall ranges from 650 m.m. in South-West corner to 1000 mm in eastern and south eastern parts of the State.

III.1.4:- Area

The area spread in Uttar Pradesh is as follows:-

Table-III-2
Area spread in U. P. (2014)

Sl.No.	Particulars	Details of Units
1	Wild Life Sanctuary	11
2	Birds Sanctuary	12
3	National Garden	1
4	Geographical Area	2,43,290 Aq. Km.
5	Total Forest Area Total Cultivated Area	1,725 (000 ha.)
6	Area Irrigated Area	17,685 (000 ha)
7	Total Irrigated Area	11,634 (000 ha.)
8	Gross Irrigated Area	16,936 (000 ha.)
9	Percentage of Irrigated Area by different means	
	(a) Canals	25.42%
	(b) Tube-wells	67.15%
	(c) Ponds, Lakes and Others	7.43%

Source:- Statistical Diary, U.P. 2014.

III.1.5 Population

Table-III.3
Population of U.P.

Sl.No.	Particulars	Year	In 000/ Numbers
1	Total Population	2011	1,99,812
2	Total Male Population	2011	1,04,481
3	Total Female Population	2011	95,332
4	Total Rural Population	2011	1,55,317
5	Total Rural Male Population	2011	81,145
6	Total Rural Female Population	2011	74,172
7	Total Urban Population	2011	44,495
8	Total Urban Male Population	2011	23,566
9	Total Urban Female Population	2011	20,929

Source: Census of India, 2011

III.1.6: Literacy

The Literacy rate in Uttar Pradesh as per 2011 census was estimated at 69.72 per cent which was below the national average rate of 74 per cent. While the literacy rate for males were estimated as 79.24 per cent against the literacy rate of 59.26 per cent for females in the state of Uttar Pradesh.

III.1.7:- Economy

The per capita income in the State of Uttar Pradesh was estimated at Rs. 19,233/- at the constant price during 2004-05 and Rs. 36,250/- at current prices. The Net State Domestic Product (NSDP) was estimated at Rs. 4,03,509 crores at the constant price during 2004-05 against Rs 7,60,542 crores as net State Domestic Product (NSDP) at the current prices. While the gross State Domestic Product (GSDP) at the constant prices during 1999-2000 was estimated at Rs. 602608 million which has increased to Rs. 7,4,8134 million till the year 2009-10. The Gross State Domestic Product (GSDP) at current prices during 2013-14 has been estimated as Rs. 8,62,746 crores in the State of Uttar Pradesh (State Planning Institute U.P.)

The distinguished feature of the economy of Uttar Pradesh is its regional imbalance. As economic indicators such as agricultural productivity, infrastructural facilities, industrial growth, the economy of U.P. can better be seen in the four distinct economic regions: Western, Eastern, Central and Bundelkhand. The Western region is agriculturally prosperous on the other hand Bundelkhand has low agricultural growth.

III.1.8:- Land Utilization

Table-III.4
Land Utilization in U.P. (2012-13)

(Area in Lakh Hect)

Sl.No.	Particulars	Area in Lakh Hect.	%
1	Reporting Area	241.70	100.00
2	Forest	16.58	6.86
3	Barren & Unculturable Land	4.79	1.98
4	Land put to Non -Agriculture Uses	28.93	11.27
5	Culturable Waste Land	4.23	1.75
6	Permanent Pastures and others grazing land	0.65	0.27
7	Land under Miscellaneous Trees, crops and groves etc.	3.50	1.45
8	Current Fallows	12.01	4.97
9	Fallows Land (other than current fallow)	5.37	2.22
10	Net Area Sown	165.65	68.54
11	Area Sown More than Once	92.57	38.30
12	Gross Cropped Area	258.22	--

Source: Statistical Diary, Govt. of Uttar Pradesh, (2012-13)

Table-III.4 clearly indicates that the total reporting area of U.P. was 241.70 lakh hectares of which about 68.54% was under cultivation of crops. The share of area sown more than once was

accounted as 38.30% of the total reporting area. Thus, it is clarified that about half of the net area sown was double or triple cropped and the remaining was mono-cropped in the State of Uttar Pradesh. Among the other uses the share of land put to non agricultural uses has still remained higher i.e. 11.27 per cent in Uttar Pradesh against the lowest share as 0.27% under permanent pastures and other grazing land. The gross cropped area in the State was accounted to 258.22 ha. Thus, the cropping intensity was estimated as 156% only in the State as a whole during the year 2012-13.

III.1.9:- Area, Production and Productivity of Main Crops Grown in Main Seasons of 2012-13 in Uttar Pradesh

Table-III.5
Season-wise Area, Production and Productivity of Main Crops Grown during 2012-13 in Uttar Pradesh

Sl.No.	Name of crops	Area in Lakh Ha	Production in Lakh M.T	Productivity in Qtl./ha
Kharif Season				
1	Paddy	58.96	144.56	24.53
2	Maize	6.92	12.81	18.53
3	Bajra	9.22	18.00	19.52
4	Jowar	1.79	2.42	13.50
5	Ground nut	0.88	0.08	10.15
6	Sugarcane	21.59	1343.46	624.63
7	Total Pulses (Kharif)	0.64	3.88	4.18
8	Total Oilseed (Kharif)	4.21	1.78	6.52
Rabi				
1	Wheat	97.88	314.76	32.17
2	Barly	1.65	4.34	28.25
3	Gram	6.14	6.91	11.25
4	Total Oilseed	6.72	6.82	12.31
5	Total Pulses	17.43	0.67	4.43
6	Potato	5.40	131.68	243.87
	Gross Cropped Area (GCA)	258.22		

Source: Directorate of Agriculture, U.P. Krishi Bhawan, Lucknow, U.P.

Table-III.5 shows that Paddy during Kharif season in 2012-13 had covered the maximum area i.e. 58.96 lakh ha. and wheat during Rabi season had covered 97.88 lakh ha. as maximum of the Gross cropped area accounted as 258.22 ha. in the state of U.P. during 2012-13. The area under Rabi Pulses was considerably higher during 2012-13 in comparison of Kharif pulses in the whole state of Uttar Pradesh. Sugarcane was important crop which had covered 21.59 lakh ha. out of the 258.22 Lakh ha as Gross Cropped Area of the state. Thus, wheat and paddy were the main foodgrain crops in Uttar Pradesh. Besides, these two main crops sugarcane and Potato were the two main commercial crops in Uttar Pradesh which covered considerable area in the Gross Cropped Area of the State of U.P.

As regards the production of main crops it had been estimated that the production of Paddy was maximum i.e., 144.56 lakh M.T. during the kharif season. While during the rabi season the production of wheat was estimated as maximum i.e. 314.76 lakh M.T. in the state of U.P. The production of sugarcane was estimated as 1343.46 lakh M.T. and the production of Potato was 131.68 lakh M.T. which indicates that sugarcane as well as Potato area the staple commercial crops in the state of U.P.

Regarding productivity of main crops in Uttar Pradesh it had been found that among kharif cereal crops the productivity of Paddy was highest being 24.53 qtls per ha. against the lowest productivity of total pulses being only 4.18 qtls per ha. in the State. While among Rabi cereals it was highest i.e. 32.17 qtls per ha in case of wheat and lowest i.e. only 4.43 qtls per ha. in case of total pulses. The productivity of sugarcane was 624.63 qtls. per ha. and that of Potato was 243.87 qtls per ha. in the State.

III.1.10:- Size of Holdings in U.P. (2010-11)

Table- III-6
Category-wise operational holding and Average Size of Holdings in U.P. (2010-11)

Sl.No.	Category-wise operational holding	Area Owned In 000, Ha.	Numbers. In 000	Average Size of holding in Hect.
1	Marginal Holdings (Up to 1.00 Hect.)	7,171 (40.69)	18,532 (79.45)	0.39
2	Small Holdings (1.01 to 2.00 Hect.)	4,243 (24.08)	3,036 (13.02)	1.40
3	Semi Medium Holdings (2.01 to 4.00 Hect.)	3,629 (20.59)	1,334 (5.71)	2.72
4	Medium Holdings (4.01 to 10.00 Hect.)	2,199 (12.48)	398 (1.71)	5.52
5	Large Holdings (Above 10.00 ha.)	380 (2.16)	25 (0.11)	15.00
6	Total Holdings	17,622 (100.00)	23,325 (100.00)	0.76

Source:.. Agricultural Statistics at a glance 2012, Govt. of India.

Note: Figures in parentheses are percentage to total.

The analysis done in Table III.6 shows that the operational holding in Uttar Pradesh have been categorized in five main categories such as (i) Marginal holdings (up to 1.00 ha) (2) Small Holdings (1.01 to 2.00 Hect.) (3) Semi Medium Holdings (2.01 to 4.00 Hect.) (4) Medium Holdings (4.01 to 10.00 Hect.) (5) Large Holdings (Above 10.00 ha.). Out of the total 23,325 operational holdings in U.P., the maximum i.e. 18,532 were reported to be marginal holding of up to 1 ha. only. Thus, 79.45% of the total operational holding were marginal holding in U.P., 13.02% were small, 5.71% were semi-medium, 1.71% were medium and only 0.11% were large holdings. While, the area owned by marginal holdings was 40.69 per cent, by small 24.08%, by semi-medium 20.59%, by medium 12.48% and by large only 2.16%. Thus, the maximum of the area owned i.e. 65% of the total area under the operational holdings was owned by marginal and small holdings only. While 33% was owned by semi medium and medium holdings and only 2.16% by large holdings. The average size of holdings varied from 0.39 ha. in the marginal category to 15 ha. in the category of large holding in the state of Uttar Pradesh.

III.2. Status of ACABCs Scheme in the State

III.2.1. Agri.- Ventures Established in Western Region of U.P. (2002-2015)

The district-wise distribution of agri.-ventures established in western U.P. during 2002-2015 worked out in table-III.7 shows that the total numbers of agri.-ventures successfully established in the western region of Uttar Pradesh during the years 2002-03 to 2015-16 were accounted as 2150 of which the maximum i.e. 434 agri.-ventures were established during the year 2013-14 only. While in the starting year of launching of the scheme i.e. 2002-03 the numbers of established agri.-ventures were only 5 in the whole western region of U.P. The number of established agri.-ventures has increased very sharply onward 2011-12 from 215 to 384 till the year 2015-16. This clarifies that ACABC scheme gained more importance onward 2011-12 in the western region of Uttar Pradesh.

The district-wise distribution of agri.- ventures in Western region during the span of the years from 2002-03 to 2015-16 indicates that the maximum numbers of agri.-ventures i.e. 302 have been established successfully in Bareilly district against the minimum i.e. only 4 in Gautam Budha Nagar district during the span. The next important district was Moradabad wherein 217 agri.-ventures were successfully established during the years 2002-03 to 2015-16. The other districts were Amroha (170) Mojaffarnagar (139), Agra (135), Pilibhit (129) Bijnor (121) and Aligarh (112) wherein considerable numbers of agri.-ventures were established successfully in the Western region of Uttar Pradesh. Thus, out of the total 30 districts of western U.P., only 8 districts were found such districts where the success rate of ACABCs Scheme was considerable. While in remaining 22 districts the Status of ACABCs Scheme was extremely poor which clarifies that in Western U.P. the development of ACABCs Scheme was comparatively much poorer. The related data are given in Table-III.7.

III.2.2. Agri-Ventures Established in Eastern Region of U.P. (2002-2015)

The district-wise number of agri.-ventures established during 2002-2015 in Eastern U.P. worked out in Table-III-8 shows that the total numbers of agri.-ventures established during the same span of 2002-2015 in eastern region of Uttar Pradesh were accounted to 2170 which are a little higher than that in the western region of Uttar Pradesh. The year-wise number of agri.-ventures established successfully in the whole eastern region of U.P. indicates that it increased from 39 in

the year 2003 to 206 till the year 2009 with ups and downs, which suddenly decreased tremendously to 95 in the year 2010. But, thereafter, the number of agri-ventures increased from 224 in the year 2011 to 256 till the year 2015. Thus, in eastern region of Uttar Pradesh the establishment of agri.-ventures has gained importance since the year 2005. While, in western region of U.P. it has gained such importance since the year 2011. Accordingly, the number of successfully established agri- ventures was slightly higher in eastern region of U.P. as compared to that in Western U.P. The district-wise distribution of successfully established agri- ventures in eastern region of U.P. indicates that the highest number of agri-ventures i.e. 327 have been established till the year 2015 in Varanasi district followed by 269 agri-ventures in Azamgarh district and 182 agri-ventures in Jaunpur district of eastern U.P. Amethi was such a district where not a single agri-ventures was established till the year 2015. In other districts of eastern U.P. the number of such established agri.-ventures varied from only 8 in Kaushambi district to 145 agri-ventures in Ghazipur district of Eastern U.P. The related data are given in Table-III-8.

III.2.3. Agri-Ventures established in Central Region of U.P. (2002-2015):-

The district-wise number of agri.-ventures established during 2002-2015 in central region of Uttar Pradesh analysed in Table III-9 indicates that the total number of successfully established agri.-ventures in this region was accounted to 369 till the year 2015. In this region the number of the successfully established agri-ventures has increased from only 3 in the year 2003 to 65 till the year 2015 with sudden decrease in the years 2007 to 2008 and 2012 during the span of 2002 to 2015. Thus, it is safely accounted that in Central region of U.P. the increase in the number of established agri-ventures was continuous but not sharp till 2015 since the beginning in 2003. The district-wise analysis shows that the highest i.e 79 agri.-ventures have been established in kheri district till the year 2015 followed by 77 agri.-ventures established so far in Lucknow district till the year 2015. While, in the remaining districts of this region the number of successfully established agri.-ventures has varied from 12 in Unnao district to 41 in Hardoi district during the same span of period. Thus, in central U.P. Kheri as well as Lucknow districts have gained more importance in establishing agri.-ventures followed by district Barabanki. The related data are given in Table-III-9.

III.2.4 Agri-Ventures Established in Bundelkhand Region of Uttar Pradesh (2002-2015)

The district-wise number of agri.-ventures established during 2002 to 2015 in Bundelkhand Region of Uttar Pradesh worked-out in Table III-10 shows that the total number of successfully established agri.-ventures in Bundelkhand region till the year 2015 was accounted to 197. The number of agri.-ventures increased from 4 only in the year 2002 to 56 till the year 2012 and thereafter it decreased tremendously to 3 in the year 2014 which gradually increased to 17 till the year 2015. Thus, the establishment of agri-venture successfully in the whole Bundelkhand region has been extremely poor and slow which obviously clarifies that Bundelkhand region has not yet gained importance in establishing agri.-ventures by the trained agricultural graduates. The district-wise distribution of agri.-ventures established in Bundelkhand region indicates that the highest numbers i.e. 59 agri.-ventures have been established in Jhansi district followed by 44 agri.-ventures in the Jalaun district till the year 2015. While in other districts of Bundelkhand the number of agri.-ventures established, so far varied from 7 only in Chitrakut district to 32 in Hamirpur district. Thus, the growth in establishing the agri.-ventures successfully in the whole Bundelkhand has been extremely poor as well as slow. This very well indicates that establishing agri.-ventures in Bundelkhand region has not gained any importance so far as compared to that in other regions of Uttar Pradesh. The related data are given in Table III-10.

Table-III-7
District wise Number of Agri-Ventures Established during 2002-2015 in Western U. P.

Sl. No.	Western U.P. (Districts)	No. of Ventures Established														
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1	SAHARANPUR	0	0	1	0	3	1	4	2	0	5	17	7	11	20	71
2	MUZAFFARNAGAR	1	1	2	4	7	6	1	4	5	11	15	18	32	32	139
3	SHAMLI	0	0	0	0	0	0	0	0	0	0	6	3	10	19	
4	MEERUT	0	0	2	15	3	2	0	2	1	4	24	17	13	19	102
5	BAGPAT	0	1	0	4	5	0	1	3	1	0	4	5	3	0	27
6	B.SHAHAR	0	0	1	3	5	2	7	10	5	11	5	12	16	19	96
7	GHAZIABAD	1	0	0	5	0	1	1	0	5	6	12	0	1	0	32
8	G.BUDDHA NGR.	0	0	0	0	0	0	0	0	1	0	1	0	1	1	4
9	HAPUR	0	0	0	0	0	0	0	0	0	0	0	3	5	6	14
10	ALIGARH	0	4	1	8	6	4	0	1	2	16	13	20	11	26	112
11	HATHRAS	0	0	2	3	3	3	1	1	0	3	5	6	13	15	55
12	ETAH	0	0	0	4	0	3	2	1	0	4	4	2	3	9	32
13	KASHGANJ	0	0	0	0	0	0	0	0	0	0	0	2	0	4	6
14	AGRA	2	0	1	4	6	4	1	1	1	13	20	28	11	43	135
15	MATHURA	0	0	0	2	0	2	1	0	1	4	6	3	1	7	27
16	FIROZABAD	0	1	0	6	2	2	0	1	0	0	4	6	2	12	36
17	MAINPURI	0	0	0	2	0	2	2	1	0	4	0	4	0	9	24
18	BAREILLY	0	0	1	8	8	6	7	6	3	14	40	81	74	54	302
19	BUDAUN	0	1	0	0	0	1	2	9	1	4	1	13	15	0	47
20	SHAHJAHANPUR	0	0	2	1	2	0	0	3	1	2	3	7	6	5	32
21	PILIBHIT	0	0	2	3	2	3	6	9	4	9	25	33	23	10	129
22	BIJNOR	0	0	0	2	6	4	1	0	8	17	19	24	27	13	121
23	MORADABAD	0	0	1	2	4	3	6	2	19	21	35	56	34	34	217
24	AMROHA	0	0	1	1	0	0	0	2	16	49	38	33	19	11	170
25	RAMPUR	0	1	1	0	1	0	2	3	3	6	16	26	26	8	93
26	SAMBAL	0	0	0	0	0	0	0	0	0	0	0	2	6	1	9
27	FARRUKHABAD	0	0	0	1	0	0	1	2	0	1	0	3	1	1	10
28	KANNAUJ	0	0	1	1	1	2	2	0	0	1	2	7	0	2	19
29	ETAWAH	1	0	1	5	0	1	2	0	1	8	3	10	3	11	46
30	AURAIYA	0	0	0	3	3	2	1	1	4	2	5	0	1	2	24
	Total	5	9	20	87	67	54	51	64	82	215	317	434	361	384	2150

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

Table-III-8
District wise Number of Agri-Ventures Established during 2002-2015 in Eastern U.P.

Sl. No.	Eastern U.P. Districts	No. of Agri-Ventures Established														
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1	ALLAHABAD	0	0	2	7	1	7	7	6	1	3	2	1	2	6	45
2	KAUSHAMBI	0	0	0	0	0	1	0	0	0	0	0	0	1	6	8
3	PRATAPGARH	0	1	1	1	3	4	1	10	2	12	4	4	1	7	51
4	VARANASI	0	30	36	42	29	20	11	25	13	22	23	41	13	22	327
5	CHANDAULI	0	0	12	13	3	3	5	4	1	3	2	2	2	5	55
6	GHAZIPUR	0	0	7	22	28	14	19	18	5	16	10	0	2	4	145
7	JAUNPUR	0	1	6	10	19	18	21	21	10	20	8	6	20	22	182
8	MIRZPUR	0	0	5	6	7	4	12	10	6	8	12	12	7	8	97
9	SONBHADRA	0	0	1	0	0	0	0	3	1	0	0	2	2	1	10
10	S. RAVI DAS NGR	0	0	4	3	3	0	1	1	3	2	4	5	0	3	29
11	AZAMGARH	0	0	1	23	40	23	39	39	15	15	20	22	23	9	269
12	MAU	0	0	3	7	7	8	16	4	4	6	5	0	9	12	81
13	BALLIA	0	1	2	10	1	7	14	7	1	5	15	1	5	4	73
14	GORAKHPUR	0	0	0	8	16	4	10	2	2	8	10	0	6	35	101
15	MAHRAJGANJ	0	0	0	2	5	1	2	0	0	6	2	1	3	1	23
16	DEORIA	0	2	0	9	10	10	9	10	5	10	1	2	6	1	75
17	KUSHI NAGAR	0	0	0	2	14	10	8	4	2	11	3	5	7	10	76
18	BASTI	0	1	1	3	4	7	1	3	3	17	15	0	5	18	78
19	SIDDHARTH NAGAR	0	1	0	1	4	3	1	0	0	1	0	0	0	2	13
20	SANT KABIR NGR	0	0	0	2	6	3	2	2	0	3	0	0	2	4	24
21	FAIZABAD	0	0	0	1	7	1	0	5	1	4	3	1	4	15	42
22	AMBEDKAR NAGAR	0	0	0	5	7	10	8	7	6	9	3	3	4	4	66
23	SULTANPUR	0	2	0	13	12	7	12	11	8	13	21	6	7	24	136
24	AMETHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	GONDA	0	0	0	4	2	2	6	9	5	15	15	7	6	21	92
26	BALRAMPUR	0	0	0	0	1	2	0	0	0	4	1	1	1	4	14
27	BAHRAICH	0	0	0	6	0	0	3	1	1	4	10	1	3	7	36
28	SHRAVASTI	0	0	0	4	0	0	1	4	0	7	2	0	3	1	22
	Total	0	39	81	204	229	169	209	206	95	224	191	123	144	256	2170

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

Table-III-9**District wise Number of Agri-Ventures Established during 2002-2015 in Central U.P.**

Sl. No.	Central U.P. (Districts)	No. of Agri-Ventures Established														
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1	BARABANKI	0	0	0	0	3	3	1	2	4	4	0	4	6	11	38
2	LUCKNOW	0	1	8	20	19	4	2	3	1	3	0	3	0	13	77
3	UNNAO	0	0	0	0	0	0	0	1	1	2	2	2	2	2	12
4	RAEBARELI	0	0	0	2	3	4	6	5	5	6	2	1	1	5	40
5	SITAPUR	0	0	0	5	4	1	2	0	2	5	2	3	9	0	33
6	HARDOI	0	0	2	4	8	3	4	5	1	5	1	3	1	4	41
7	KHERI	0	0	0	4	3	1	3	5	4	15	5	4	15	20	79
8	FATEHPUR	0	0	0	1	0	1	1	4	2	0	0	0	1	7	17
9	KANPUR CITY	0	1	2	0	1	2	1	0	2	1	1	1	0	2	14
10	KANPUR DEHAT	0	1	0	1	2	3	2	1	2	3	1	1	0	1	18
	Total	0	3	12	37	43	22	22	26	24	44	14	22	35	65	369

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

Table-III-10**District wise Number of Agri-Ventures Established during 2002-2015 in Bundelkhand, U.P.**

Sl. No.	Bundelkhand, U.P. (Districts)	No. of Agri-Ventures Established														
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1	JHANSI	2	2	2	2	3	2	2	3	1	17	18	1	1	3	59
2	LALITPUR	0	0	0	2	0	1	0	1		2	6	1	0	5	18
3	JALAUN	2	1	1	1	3	0	0	1	1	14	17	1	0	2	44
4	HAMIRPUR	0	1	1	5	5	1	0	2	4	4	4	0	1	4	32
5	MAHOBA	0	0	0	0	2	0	0	1	1	4	6	0	0	2	16
6	BANDA	0	0	0	0	0	2	0	2	3	9	4	1	0	0	21
7	CHITRAKUT	0	0	0	0	0	1	1	1		1	1		1	1	7
	Total	4	4	4	10	13	7	3	11	10	51	56	4	3	17	197

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

III.3. Agricultural Extension Services Provided to Farmers by Agri.- Clinics and Agri.- Business Centres in U.P.

III.3.1. Unit/Project-wise Distribution of Agri-Ventures Established for Providing Agricultural Extension Services to Farmers in U.P. during 01.04.2002 to 27.04.2016

The unit/project-wise distribution of agri-ventures established for providing agricultural extension services to farmers in U.P. during 1.4.2002 to 27.4.2016 analyzed in Table III-11 indicates that the total number of agri-ventures established successfully during the span of 1.4.2002 to 27.4.2016 in the whole state of Uttar Pradesh has been accounted to 4,998 against the total 20,664 agri.-ventures established successfully in the whole India. Thus, the state of Uttar Pradesh has covered more than 24 of the total agri-ventures established in India, so far, since, the inception of the ACABCs Scheme till April, 2016. This is really a good start in the transformation of agriculture towards becoming a profitable business. Among the various units and projects established in Uttar Pradesh for providing agricultural extension services as well as inputs to the needy farmers at their doorsteps, the projects/units such as ACABCs (Agri.-clinics and Agri-Business Centre) have been established in maximum numbers i.e. 2,606 till 27.04.2002 against 6,763 in the whole of India. Thus, the state of Uttar Pradesh has established about 38.53% of the total agri.-clinics and agri. business Centres of the country and has drawn the attention of the majority of farmers as well as majority of unemployed agriculture graduates, post-graduates and doctorates in various disciplines of agriculture and allied agriculture sectors of the country. The next important projects established in second highest numbers i.e. 1,139 were Dairy/Poultry Piggary/ Goatary in the state of Uttar Pradesh against the total 5,331 in the whole country covering about 21.36 percent of the India alone. The number of agri.-clinics established separately have also been found to be considerable i.e. 557 in Uttar Pradesh against the total 3,119 in the country as a whole covering 17.85% by this state alone. Farm Machinery units have also been established in considerable number i.e. 195 in the state of Uttar Pradesh against the total 711 in India as a whole. Thus, in the State of Uttar Pradesh, these four projects particularly AC-ABCs (Agri.-Clinics and Agri.-Business Centres) Dairy/Poultry/Piggary/Goatary units, Agri-clinics and Farm Machinery, Units have been given comparatively more importance than other agricultural projects. Also among the other projects/Units, Apiary, Rural Godowns, Veterinary Clinics and Vegetable Production and Marketing as well as Direct Marketing units have been established in Uttar Pradesh covering 64%, 56%, 24%, 21% and 23% respectively of

the respective total units established in the country as a whole. Animal Feed Units (19.08%), cultivation of Medicinal Plants (13.44%), Seed Processing and Marketing (11.41%), Agricultural Journalism (12.56%), Organic Production Food Chain (11.36%), Vermin-Composing /Organic Manour (10.40%) Bio-Fertilizer Production and Marketing (11.46%) and Nursery Units (10.72%) have also been established in Uttar Pradesh covering with the percentages given in parentheses against India respectively. Some other important units, such as Fisheries development, Floriculture units, Horticulture units, soil testing laboratories value addition units and crop production units have also been established in Uttar Pradesh. The related data are given in Table III-11.

Table-III-11
Unit/Project-wise Distribution of Agri-Ventures Established for providing Agri.-Extension Services to Farmers in U.P. during 01.04.2002 to 27-04-2016

Sl.No.	Unit/Projects providing Agri.-Extension Services	No. Agri-Ventures Established		
		U. P.	India	% of U.P.
1	Agri-Clinics	557	3119	17.85
2	Agri-clinics & ABCs	2606	6763	38.53
3	Bio- Fertilizer Production &Marketing	12	102	11.46
4	Animal feed Unit	9	47	19.08
5	Contract Farming	8	58	13.49
6	Cultivation of Medicinal Plants	12	112	13.44
7	Direct Marketing	38	168	22.61
8	Farm Machinery Unit	195	711	24.42
9	Fisheries Development	29	348	8.33
10	Floriculture Unit	7	107	6.54
11	Horticulture Unit	11	170	6.44
12	Landscaping + Nursery	1	113	0.88
13	Nursery	53	495	10.72
14	Organic Production Food Chain	10	88	11.36
15	Pesticides Production and Marketing	2	40	5.00
16	Value Addition	22	271	8.11
17	Seed Processing and Marketing	39	333	11.41
18	Soil Testing Laboratory	5	102	4.90
19	Vegetable Production and Marketing	51	237	21.51
20	Vermi-compositing/Organic Manure	53	495	10.40
21	Veterinary Clinics	21	873	24.05
22	Crop-Production	11	197	5.58
23	Dairy/Poultry/Piggary/Goatary	1,139	5331	21.36
24	Rural Godown	27	48	56.25
25	Production & Marketing of Bio-Control Agent	8	18	4.44
26	Agriculture Journalism	2	16	12.56
27	Mushroom Cultivation	5	99	5.05
28	Apiary	65	101	64.35
	Total	4,998	20,664	24.18

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

III.3.2. Progress of Agri-Ventures Established under Top-Five Units of ACABCs Scheme as on 27.04.2016 in Uttar Pradesh

The progress of Agri.-ventures under top five units of ACABCs Scheme as on 27.04.2016 in Uttar Pradesh worked out in Table-III-12 indicates that the total numbers of agri.-ventures established under top five units in Uttar Pradesh till 27.04.2016 were accounted to 4,562 against 16,025 in India. Thus, the state of Uttar Pradesh alone has covered 28.47 percent of the total agri.-ventures established in India till April, 2016. This confirms that progress under ACABCs Scheme in Uttar Pradesh has been significantly encouraging. Among the top five units of ABABCs Scheme, the agri- clinics and agri-business centres unit has been on the top wherein the total 2606 agri.-ventures have been established successfully against the total 6763 agri.-ventures established in India. Thus, Uttar Pradesh has covered highest i.e. 38.53% of the total agri.-ventures established so far in the country till April, 2016. The numbers of agri.-ventures established under Agriculture unit have been estimated to 557 against 3119 in India covering 17.85%. This also covered considerable share. While the numbers of agri.-ventures established under the unit of Dairy/Poultry/Piggery/goatary have been accounted to 1139 in U.P. against 5331 in India covering 21.36%. The numbers of agri.-ventures established under farm Machinery unit have been accounted to 195 in U.P. against 711 in India covering 24.42%. The number of Agri.-ventures established under Apiary unit has been accounted to 65 against 101 in India covering 64.35%. Thus, the numbers of agri.-ventures under the units of Apiary as well as Farm Machinery have been found covering higher shares of India's total agri.-ventures established so far till April, 2016. The related data are given in Table III-12

Table-III-12
Progress of Agri.-Ventures under Top-Five Units/Projects of ACABCs Scheme as on 27.4.2016 in Uttar Pradesh

Sl.No.	Name of Units/Projects Providing Agri.-Extn. Services	No. of Agri.-Ventures Established		
		U.P.	India	% of U.P.
1	Agri-Clinics And Agri-Business Centres	2,606	6,763	38.53
2	Agri-Clinics	557	3,119	17.85
3	Dairy/Poultry/Piggery/Goatary	1,139	5,331	21.36
4	Farm Machinery Units	195	711	24.42
5	Apiary Units	65	101	64.35
	Total	4,562	16,025	28.47

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

III.4. Contribution of ACABCs Scheme in Agricultural Development of the State of Uttar Pradesh

III.4.1. The economy of Uttar Pradesh is the third largest economy in India. Uttar Pradesh is an agrarian state which contributes about 18.9 percent in the food grains production of the country. Therefore, proper implementation of the ACABCs Scheme particularly in the state of Uttar Pradesh will enhance the food grains production adequately in India in the coming years.

III.4.2. The Nodal Training Institutes (NTIs) established by MANAGE in the State of Uttar Pradesh may present vision for the ACABCs Scheme particularly how good they would be in providing post training support in liaison with Bankers, Agri.-Business Firms and various line departments of the State Government.

III.4.3. Implementing agencies of ACABCs Scheme such as MANAGE, NABARD and DAC-Ministry of Agri. and Farmers Welfare, Govt. of India help the agri-preneurs to organize them and to federate at district/ state levels to serve farmers by ensuring better backward and forward linkages in the path of agricultural development in the respective areas of state.

III.4.4 Personnel (Agriculture Graduates) trained under Agri-clinics and Agri-Business Centres (ACABCs) Scheme are envisaged to provide agricultural extension services to the farmers. Also use of innovative and interactive methods of information, dissemination like pico projectors, low cost films, hand held devices, mobile based services, KCCs (Kisan Call Centres) etc. are also the process of being used and convergence brought among extension efforts under different programmes and schemes at the village level through ATMA (Agriculture Technology Management Agency) and BTT (Block Technology Teams) to boost agricultural development in the state.

III.4.5. The ACABCs Scheme is currently in operation in all the districts of 29 states and 3 Union Territories. This Scheme essentially focuses on institutionalizing key reforms like extension support to farmers through ATMA which covers activities to be implemented at the state and district levels. State level activities include preparation of state extension work plan, Human Resource Development of extension functionaries, organization of various agri-culture related activities including monitoring and evaluation.

III.4.6:- The aim of ACABCs Scheme launched in 2002 was to strengthen the extension services and to tap the potential of unemployed agriculture graduates in order to provide them self employment opportunities. Under this scheme, free training and landholding support is provided to unemployed agri-culture graduates to enable them with required knowledge, skill and orientation towards agri-preneurship. Needed support is also extended to the trained graduate for developing a bankable agri-business project and for availing loans from the commercial banks at concessional rates. The scheme is being implemented by Government of India through MANAGE (National Institute of Agricultural Extension Management) and the NABARD (National Bank for Agriculture and Rural Development) MANAGE Coordinates and implements the training and handholding support through a network of 72 NTIs (Nodal Training Institutes) identified through a designed process of screening and assessment. NABARD looks after the credit part of the scheme by refinancing the agri-business loans granted by commercial banks to the trained graduates.

III.4.7:- The ACABCs Scheme has invoked tremendous interest in the unemployed agriculture graduates towards entrepreneurship in the rural areas. Because ever since its launching in the year 2002, a total of 46,231 candidates have been trained under this scheme, out of which 19,471 have established their ventures successfully by January, 2016 in India. While in the state of U.P., the number of trained graduates were 9,986 by 2015-16 of which 4998 have established their ventures by 27.04.2016. The overall progress in the establishment of agri-ventures by trained graduates was about 42 percent since its inception. The previous year's success rate was also 42 percent. A higher success rate during the subsequent years is anticipated.

III.4.8:- Alongwith agricultural development in the state of U.P. many other developments have been done through ACABCs Scheme, including development of agri-preneurs, awareness of prospective candidates about the ACABC Scheme and infrastructure facilities available for training them. Thus, the need for efficient support organizations to monitor the activities of small enterprise was also felt. Further, prediction of future demand, introduction of modern technology, cost control and business expansion are the main areas where entrepreneurs need regular support for boosting agricultural development. Major revisions in ACABCs Scheme have been done during 2010-11 to accommodate all the concerns.

III.4.9:- The training cost per trainee has been revised and limited to Rs. 35000 by proportionately raising the limits under the different components. To give incentive to most successful agri-preneurs under the ACABCs Scheme, an element of refresher training has been introduced in the revised scheme format. This training of about 3-5 days duration would be conducted in the specialized institutions like SAUs/ICAR institutes/IIMS/IITS/CSIR institutes/DST institutes/Private institutions. Also NABARD has been given support to organize sensitivization training and workshop to motivate the bankers across the country to provide credit to agri-preneur for establishing ventures.

III.4.10:- Under ACABC Scheme, the benefit of subsidy shall be limited for the project cost up to Rs. 20 lakhs (plus 5 lakhs for extremely successful individuals) for individual projects and projects cost up to Rs. 100 lakhs for a group project (by a group of minimum 5 individuals) of trained candidates under the scheme. Also to ensure that the provisions made under the revised scheme are gainfully utilized and scheme achieves the desired success, sufficient checks and balances and an effective monitoring has been put in place with the active involvement of all the stakeholders including MANAGE, NABARD, Banks, State functionaries SAUs and ICAR.

III.5:- ACABCs Scheme at –A-Glance in the State of Uttar Pradesh (2002-2016)

Table-III-13 indicates a quick momentary view of the ACABCs Scheme in the state of Uttar Pradesh since inception to the latest year (2002-2016). This scheme was recommended by Dr. M.S. Swaminathan Committee in India. Later on, this scheme was announced by Central Finance Minister on 28th February, 2001. Thereafter, the scheme of ACABCs was duly launched on 9th April, 2002. The eligibility-criteria for training in Nodal Training Institutes (NTIS) was fixed as Graduates in Agriculture and Allied subjects. The implementing agencies were MANAGE, NABARD, DAC(Deptt. of Agriculture and Cooperation) NTIs (Nodal Training institutes) and Commercial Banks. The total number of NTIs in Uttar Pradesh till 2015-16 were 18.

Regarding subsidy and margin money under ACABCs Scheme, the subsidy was available at the rate of 36 percent for general candidates and at the rate of 44 percent for scheduled castes (S.C.) and scheduled tribes and women candidates. The margin money was available as per the guidelines of RBI. (Reserve Banks of India). The number of total applications received in Nodal Training Institutes (NTIs) of Uttar Pradesh during the span of 2002-03 to 2015-16 were

estimated to 10980. While the numbers in Uttar Pradesh during the same span of 2002-03 to 2015-16 were reported to 9986. But the numbers of total agri-venture established successfully in Uttar Pradesh during the same span of 2002-03 to 2015-16 were found to be 4998. The number of total batches completed trainings from the Nodal Training Institutes (NTIs) of Uttar Pradesh were reported as 260. While, the numbers of Training Programmes under all the 28 units/projects in U.P. were reported as 310 in all. Thus, the state of Uttar Pradesh has made an attractive progress in improving overall development in agriculture sector as well as reducing the severe unemployment among agriculture graduates, post-graduates and even doctorates by providing them the opportunities of self-employment through ACABC Scheme. The related information are given in Table III-13.

Table-III-13
ACABCs Scheme At-A-Glance in Uttar Pradesh (2002-03 to 2015-16)

Sl.No.	Particulars	Information
1	Committee which recommended ACABCs Scheme in India	M.S. Swaminathan Committee
2	Announcement date of ACABCs Scheme by Central Finance Minister	28 th February, 2001
3	Launching date of ACABCs Scheme	9 th April, 2002
4	Eligibility Criteria for Training in NTIs	Graduate in Agriculture and allied subjects
5	Implementing Agencies	MANAGE, NABARD, DAC (Deptt. of Agri & Coop.), NTIs (Nodal Training Institutes) and Commercial Banks
6	Total Numbers of NTIs in U.P. till 2015-16	18
7	Subsidy and Margin Money under ACABCs Scheme	Subsidy-36% for General Candidates and 44% for SC, ST and Women Candidates. Margin money-As per RBI Guidelines
8	No. of total applications received in NTIs of U.P. during (2002-03 to 2015-16)	10980
9	No. of total trained Agri-ventures in U.P. during (2002-03 to 2015-16)	9986
10	No. of total Agri-ventures established in U.P. during (2002-03 to 2015-16)	4998
11	No. of total braches completed trainings from NTIs of U.P.	260
12	No. of Training Programme	310

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

III.6:- Trend of Growth /Progress under ACABCs Scheme in the State of Uttar Pradesh during 1.4.2002 to 27.4.2016.

III.6.1. Growth /Progress of Top-Eight Nodal Training Institutes (NTIs) Under ACABCs Scheme as on 27.4.2016 in Uttar Pradesh

The progress of top-eight Nodal Training Institutes (NTIs) under ACABCs Scheme as on 27.4.2016 in the state of Uttar Pradesh worked-out in Table III-14 shows that out of 18 Nodal Training Institutes currently running in the state of Uttar Pradesh only 8 have shown considerable progress since the inception of ACABCs Scheme till 27.04.2016. Through these 8 top nodal training institutes only, the total 8,739 agri-ventures have been trained of which more than half i.e. 4,611 agri-ventures have been established successfully in the state of U.P. These agri-ventures have been trained in 250 batches so far till 27.04.2016. Thus, it is obviously evident that Uttar Pradesh has shown an attractive progress under ACABCs scheme towards agricultural development.

The Nodal Training Institutes-wise distribution shows that S.M.G.G.S. Varanasi has trained the maximum i.e. 3,736 agri-ventures of which 2,222 agri-ventures have been established successfully so far. This NTI has completed the maximum i.e. 106 batches of trainees. Jubilant Agriculture Rural development Society, Moradabad Center has trained 1,791 agri-ventures in 51 batches of which 977 agri-ventures have been established successfully. Centre for Agriculture and Rural Development, Noida has also trained considerable number i.e. 666 agri-ventures in 19 batches of which 340 agri-ventures have been established successfully. In other top NTIs the number of trained agri-ventures has varied from 405 by S.M.G.G.S., Varanasi to 583 by J.A.R.D.S., Agra. While the number of agri-ventures established has been found varying from 277 as maximum by J.A.R.D.S., Agra to the minimum i.e. 176 by Indira Gandhi Institute of Co-operative Management, Lucknow. Thus, among these 8 top NTIs S.M.G.G.S., Varanasi has trained maximum agri-ventures against the Shree Maa Guru Gramodhyog Sansthan , Jhansi which has trained the minimum agri-ventures so far. But in establishing the agri-ventures S.M.G.G.S. has established maximum against the I.G.I.C.M., Lucknow which has established the minimum agri-ventures. So far in the state of U.P.. The related data are given in Table III.14.

Table-III-14
Growth Progress of Top-Eight Nodal Training Institutes (NTIs) Under ACABCs Scheme
as on 27.4.2016 in Uttar Pradesh

Sl.No.	Name of Nodal Training Institution (NTIs)	No. of Agri.-Ventures Trained	No. of Agri. ventures Established	No. of Training batches completed
1	Shree Maa Guru Gramodhyog Sansthan , Varanasi,	3736	2222	106
2	Jubilant Agriculture Rural development Society, Moradabad	1791	977	51
3	Center for Agriculture and Rural Development, Noida	666	340	19
4	Jubilant Agriculture Rural development Society, Agra	583	277	17
5	Shree Maa Guru Gramodhyog Sansthan, Lucknow Regional Center	583	215	17
6	Indira Gandhi Institute of Co-operative Management ,Lucknow	535	176	15
7	Centre for Agricultural and Rural Development(CARD) Mujaffernagar	440	194	13
8	Shree Maa Guru Gramodhyog Sansthan, Jhansi	405	210	12
	Total	8739	4611	250

Source:- ACABCs Cell, Manage, Hyderabad (Telengana)

III.6.2. Nodal Training Institute-wise Progress of Ventures Established under ACABCs in U.P. during 2002-2016

The Nodal Training Institute-wise numbers of agri-ventures established under ACABCs in Uttar Pradesh during 2002-03 to 2015-16 worked-out in Table-III-15 shows that the total number of ventures established successfully by the nodal training institutes in the whole U.P. has been accounted to 4,939 from the inception year 2002-03 to the latest year 2015-16. The year-wise distribution obviously shows that the progress of successfully established agri-ventures has grown tremendously from only 9 in the year 2002-03 to 748 till the year 2015-16. Thus, during the latest years the growth in numbers of agri-ventures established in the state of U.P. has been very sharp which clarifies that the launching of ACABCs scheme has been comparatively more effective as well as attractive in the state of Uttar Pradesh so far.

The nodal training institute-wise distribution shows that the growth in numbers of agri-ventures established so far has been found varying from only 1 in case of S.V.B.P.U.A.T., Modinagar to 2202 in case of S.M.G.G.S., Varanasi. This distribution also clarifies that out of the total 18 NTIs engaged in the training as well as establishment of agri-ventures, only 8 NTIs have been found taking keen interest for the growth in the numbers of agri-ventures successfully established in the state of U.P. This is also found that some of the NTIs such as S.M.G.G.S., J.A.R.D.S. and C.A.R.D. have opened numbers of NTIs in various districts of U.P. This practice by only a few NTIs must be stopped and other institutes must be encouraged in this business to receive fruitful results as this type of mal-practice is increasing visible corruption and hamper the main aims of ACABCs Schemes. Also the NTIs must run on any similar pattern and norms atleast in the state or in all the states of India. The related data are given in Table III-15.

Table-III-15

Nodal Training Institute-wise No. of Ventures Established under ACABCs Scheme in U.P. during 2002-03 to 2015-16

Sl. No.	NTIS in U.P.	No. of Ventures Established														
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1	N.R.C.A.F., Jhansi	9	11	2	15	-	-	-	-	-	-	-	-	-	-	37
2	S.M.G.G.S., Varanasi,	-	12	75	213	234	167	255	270	125	288	214	119	126	104	2202
3	N.D.U.A.T, Narendra Nagar	-	3	-	-	-	-	--	-	-	-	-	-	-	-	3
4	I.G.I. Coop.,M. Lucknow	-	3	3	57	73	39	-	-	--	-	-	1	-	-	176
5	I.V.R.I., Bareilly	-	1	-	3	-	-	-	1	-	-	-	-	-	-	5
6	C.S.A.U.A.J., Kanpur	-	1	1	1	3	8	-	-	-	-	-	-	-	-	14
7	S.I.M.A .Lucknow	-	-	25	38	26	-	-	8	-	-	-	-	-	-	97
8	S.H.I.A.T.S., Allahabad	-	-	9	11	18	32	18	11	-	-	-	-	-	-	99
9	S.B.P.U.A.T., Modinagar	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
10	C.A.R.D., Noida	-	-	-	-	-	-	10	13	34	56	90	66	27	44	340
11	R.D.S.,K.V.K., Pratapgarh	-	-	-	-	--	-	-	5	-	5	-	-	-	-	10
12	J.A.R.D.S., Morabad	-	-	-	-	-	-	-	-	47	117	190	290	228	105	977
13	S.M.G.G.S. Jhansi	-	-	-	-	-	-	-	-	-	94	110	5	1	-	210
14	J.A.R.D.S., Agra	-	-	-	-	-	-	-	-	-	-	-	56	57	164	277
15	C.A.R.D., Mujaffernagar	-	-	-	-	-	-	-	-	-	-	-	36	65	93	194
16	S.M.G.G.S., Lucknow, Reg. Centre	-	-	-	-	-	--	-	-	-	-	-	24	30	161	215
17	J.A.R.D.S., Gorakhpur	-	-	-	-	-	-	-	-	-	-	-	-	5	54	59
18	K.V.K., Kaushambi	-	-	-	-	-	-	-	-	-	-	-	-	-	23	23
	Total	9	31	115	339	354	246	283	308	206	560	604	597	539	748	4,939

Source:- ACABCs Cell, MANAGE, Hyderabad (Telengana)

CHAPTER-IV

IV. Method and Procedures of the Study

IV.1. Method of Study:-

The present study was confined to the state of Uttar Pradesh individually from the four states undertaken jointly identified for this all India Coordinated study viz. Uttar Pradesh, Assam, Telengana and Maharashtra being coordinated by Agro-Economic Research Centre, University of Allahabad, Allahabad. Thereafter, to represent properly the state of Uttar Pradesh two economic regions potential to ACABCs Scheme from the four distinct economic regions viz. Western, Eastern, Central and Bundelkhand region, namely Western and eastern regions were selected randomly on the basis of higher number of agri-ventures established therein successfully. From these two regions thus selected, one district from each selected region making two districts were undertaken randomly on the same basis. Such districts were namely (1) Bareilly from Western and (2) Varanasi from eastern region. Thereafter, from each of these two districts, thus, selected five agri-ventures having higher number of farmers benefited were chosen randomly. From each of the 10 agri-ventures, thus, selected, lists of beneficiary farmers were undertaken. These lists were further categorized in (1) Marginal (2) Small and (3) Medium and Large farms according to (1) Proper Agriculture Services, (2) Allied Agriculture Services and (3) Both Agri+ Dairy Services. The ultimate sample beneficiary farmers were undertaken @ 10 beneficiary farmers per selected agri-venture making a total of 50 sample beneficiary farmers were undertaken randomly per district proportionate to the total numbers of farmers in each selected categories of agriculture services. Thus, 100 sample beneficiary farmers were undertaken on an overall. Also as control group the samples of non-beneficiary farmers @ 5 samples per agri-venture were undertaken from the same area of the agri-ventures making 25 non-beneficiary farmers per district and 50 non-beneficiary farmers on an overall were chosen randomly for seeing the impact of agri extension services through ACABCs Scheme.

IV.2. Sampling Design

IV.2.(a):- Selection of State/Region:-

The Directorate of Extension, Ministry of Agriculture and farmers welfare had identified four states for this all India coordinated study viz. (1) Uttar Pradesh (2) Assam, (3) Telengana and (4) Maharashtra being coordinated by Agro-Economic Research Centre, University of Allahabad, Allahabad. For representing the state of Uttar Pradesh well under the individual state study out of four distinct economic regions, two economic regions namely (1) western and (2) eastern, potential to ACABCs Scheme were chosen randomly on the basis of higher number of agri-ventures established.

IV.2 (b) Selection of Districts:-

From the two regions thus, selected, one district from each selected region making two districts were undertaken randomly on the same basis of having higher number of agri-ventures established successfully. Such districts were namely (1) Bareilly from Western Region and (2) Varanasi from Eastern Region.

IV.2.(C) Selection of Agri.-Ventures:-

From each of the two districts thus, selected the lists of the agri-ventures established successfully were undertaken from the nodal training institutes. From this list five agri-ventures having higher number of farmers benefited were chosen per district randomly making a total of 10 agri.-ventures in all from the state of U.P.

IV.2. (d) Selection of Ultimate Sample Beneficiary and Non-beneficiary Farmers:-

From each of the 10 agri.-ventures thus, selected lists of beneficiary farmers were undertaken. These lists were further categorized according to (1) Proper Agricultural Services, (2) Allied Agricultural Services and (3) Both Agriculture+ Dairy Services. Thereafter, the lists of the farmers were further sub-categorized into three holding size-groups. Such holding size-groups were (1) Marginal farmers (2) Small farmers and (3) Medium and Large farmers. From these lists so categorized the ultimate sample beneficiary farmers were undertaken @ 10 farmers per agri-venture randomly proportionate to the total farmers in each category of agriculture services

as well as sub-categories of the holding size-groups making a total of 100 sample beneficiary farmers on an overall. Also as control group the samples of non-beneficiary farmers @ of 5 farmers per agri-ventures were undertaken from the same area of agri-venture making a total of 50 non-beneficiary sample farmers in total for identifying the impact of agriculture extension services through ACABCs Scheme in the state of U.P. The sampling designs are given in Table IV-1 and IV-2 separately.

Table-IV-1
District and Venture-Wise Sampling Design in U.P.

Sl. No.	Sample Ventures	District Bareilly				District Varanasi				Total Samples	
		Beneficiaries		Non-Beneficiaries		Beneficiaries		Non-Beneficiaries		Beneficia-ries	Non-Bene.
		Tot. Bene	Sample Bene.	Tot. non-bene.	Sample non-bene.	Tot. bene.	Sample Bene.	Tot. non-bene.	Sample non-bene.		
1	Venture-I	32	10	20	5	37	10	15	5	20	10
2	Venture-2	27	10	22	5	55	10	25	5	20	10
3	Venture-3	20	10	21	5	41	10	17	5	20	10
4	Venture-4	33	10	17	5	51	10	24	5	20	10
5	Venture-5	26	10	20	5	39	10	15	5	20	10
	Total	138	50	100	25	223	50	96	25	100	50

Source:- Field Survey

Table-IV-2
Holding-size Group and Agri. Service-wise same Sampling Design (U.P.)
(Grand Total)

Sl.No.	Agricultural Services of Sample Farmers	Sample Beneficiaries				Sample Non-Beneficiaries				Benefic-ary	Non-beneficia-ries
		Marginal	Small	Medium & Large	Total	Marginal	Small	Medium & Large	Total		
1	Proper Agril. Services	23	7	3	33	11	1	2	14	33	14
2	Allied Agril Services	3	1	3	7	2	1	1	4	7	4
3	Both Agri. + Dairy Services	25	16	19	60	12	7	13	32	60	32
	Total	51	24	25	100	25	9	16	50	100	50

Source:- Field Survey

IV-3. Method of Investigation and Survey of the Area under Study:

IV.3.1. Collection of Primary Data:-

The collection of primary data was done through the specially prepared and pretested schedules and questionnaires by survey method contacting the sample beneficiary and non-beneficiary farmers personally in their villages. Efforts were made to collect data on all the possible aspects such as socio-economic and educational status, crops grown, inputs incurred, output received, inputs and outputs from animals reared, extension services received from agri.-ventures and inputs as well as supports received on payment from ventures.

IV.3.2 Collection of Secondary Data:-

All the required secondary information relating to ACABCs Scheme implemented in the country as well as the state of Uttar Pradesh were collected from the implementing agencies i.e. MANAGE, NABARD, DAC-Ministry of Agriculture and Farmer Welfare, Directorate of Extension, N.T.I.s, ATMA and other offices at state, region District, Block and agri.-venture levels. Personal observations were also done during the survey and collection of information.

IV.4. Method of Analysis of Data

Only simple mathematical and statistical analysis was carried-out from the available data both primary and secondary data to derive the results for identifying the impact of agricultural extension services provided to the farmers by the agri.-ventures in terms of any increase in the incomes of the farmers and improvements in their farming business.

IV.5. Reference Period of the Study:-

The reference period for this study was agricultural year 2015-16.

CHAPTER-V

Results and Discussion

The present chapter mainly deals with the economic, social and educational status of the beneficiaries under ACABC Scheme, crops grown during kharif, Rabi and zaid seasons by them, seasonal gross irrigated and gross cropped area on their farms, inputs and outputs of kharif, Rabi and zaid crops, gross inputs, outputs and net incomes of all crops on the farms inputs, outputs and net incomes from milch animals reared by beneficiaries, inputs and outputs from draught animals reared by beneficiaries, inputs and outputs from other animals, inputs and outputs from total animals reared by beneficiaries, agricultural extension services received from agri-ventures by beneficiaries, details of hiring machines from agri-ventures by beneficiaries, details of hiring implements from agri-ventures by beneficiaries, details of inputs on payment received from ventures by beneficiaries, details of training received from ventures by beneficiaries, details of supports received from agri-ventures by beneficiaries, details of extension services and expert advices from agri-ventures which increases incomes of beneficiary farmers, details of increase in incomes through production of crops and animals on the farms of beneficiaries, details from inputs sales and other services done by ventures to beneficiary farmers, economic, social and educational status of non-beneficiaries farmers, crops grown in kharif, Rabi and zaid seasons by them, seasonal gross irrigated and gross cropped area on the farms of non-beneficiary farmers, inputs and outputs of kharif, rabi and zaid crops of non-beneficiary farmers, gross inputs, outputs and net incomes from all crops of non-beneficiary farmers, details of inputs, outputs and net incomes from milch animals reared by non-beneficiary farmers, details of inputs and outputs from draught animals reared by non-beneficiary farmers, details of inputs and outputs from other animals reared by non-beneficiary farmers and details of inputs, outputs and net incomes from total animal reared by non-beneficiary farmers in the following paragraphs:

V.1. Economic Status of Beneficiaries under ACABC Scheme in U.P.

The category-wise economic status of the sample beneficiary farmers under ACABC scheme in U.P. analysed in Table-V.1 indicates that the average area of holding per beneficiary was accounted as 1.63 ha. on an overall. Among the three categories of beneficiary farmers the

average, size of holding was comparatively larger i.e. 2.12 ha. in the category of Allied Agricultural services against the smallest i.e. 1.22 ha. in the category of proper agricultural services. In the category of both Agri + dairy services the size of holding was 1.80 ha. on an average. Thus, the average size of holding was very small in the area under study. Among the categories of farmers the holding size was comparatively bigger in allied agricultural services and smaller in proper agri -services which indicates the farmers of proper agri.-services were poorer than other sample farmers in the area under study. Regarding benefits availed under ACABC Scheme almost all the beneficiary farmers had reported to avail the benefits under ACABC Scheme. As regards the membership of agencies 79 farmers had told no and 21 had told yes. Thus, majority of farmers were not members of any agency. The membership was larger i.e. 17 in the category of both agri. +dairy services. In case of subsidiary occupations the maximum i.e. 72 farmers had told yes and 28 told no. Thus, maximum of the sample farmers were practicing subsidiary occupations alongwith their main occupation in the area under study. The related data are given in Table-V.1

Table-V-1
Category-Wise Economic Status of the Sample Beneficiary Farmers under ACABC Scheme in U.P.
(Area in Hect./Beneficiary)
(Main Beneficiary /Category)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Area of Holding (Hectare)	Benefits Availed in 2014-15 in No.	Membership of Agencies in No.		Subsidiary Occupations in No.	
					Yes	No	Yes	No
A.	Proper Agri. Services							
I	Marginal Farmers	23	0.56	23	03	20	16	07
II	Small Farmers	07	1.60	07	00	07	05	02
III	Medium & Large Farmers	03	5.43	03	00	03	01	02
	Sub Total Proper Agri. Services	33	1.22	33	03	30	21	11
B.	Allied Agri. Services							
I	Marginal Farmers	03	0.70	03	00	03	00	03
II	Small Farmers	01	1.25	01	00	01	01	00
III	Medium & Large Farmers	03	3.83	03	01	02	00	03
	Sub Total Allied Agri. Services	07	2.12	07	01	06	01	06
C.	Both Agri. + Dairy Services							
I	Marginal Farmers	25	0.74	25	05	20	18	07
II	Small Farmers	16	1.54	16	04	12	15	03
III	Medium & Large Farmers	19	3.42	19	08	11	16	03
	Sub Total Both Agri.+ Dairy Services	60	1.80	60	17	43	49	11
	G. Total Beneficiaries	100	1.63	100	21	79	72	28

V.2. Social and Educational Status of Beneficiaries under ACABC Scheme in U.P.

The category-wise social and educational status of the sample beneficiary farmers under ACABC scheme in U.P. analysed in Table V-2 indicates that out of 100 sample beneficiaries the maximum i.e. 76 were OBC, 17 general and only 7 were scheduled castes & scheduled tribes. Thus, there was preponderance of OBCs (other backward castes) among the beneficiaries under ACABC scheme in the state of Uttar Pradesh. The category-wise analysis shows that among proper agri.-services out of 33 beneficiaries 23 were OBCs. In allied agri.-services out of 7 beneficiaries 6 were OBCs and in both agri. + dairy services out of 60 beneficiaries there were 47 OBCs.

Table-V-2
Category-Wise Social and Educational Status of the Sample Beneficiary Farmers under ACABC Scheme in U.P.

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Social Group			Caste			Educational Status				Availed any Training	
			Gen.	O.B.C	S.C.& S.T.	U. Class	B. Class	S.C &S.T. Class	P.G.	Gradu-ate	H.S.& +2 Sec.	Non-Matric	Yes	No
A.	Proper Agri. Services													
I	Marginal Farmers	23	05	15	03	05	15	03	02	10	05	06	-	No
II	Small Farmers	07	01	06	00	01	16	00	03	01	02	01	-	No
III	Medium & Large Farmers	03	01	02	00	01	02	00	02	01	00	00	-	No
	Sub Total Proper Agri. Services	33	07	23	03	07	23	03	07	12	07	07	-	No
B.	Allied Agri. Services													
I	Marginal Farmers	03	00	02	01	00	02	01	00	00	02	01	-	No
II	Small Farmers	01	00	01	00	00	01	00	00	00	01	00	-	No
III	Medium & Large Farmers	03	00	03	00	00	03	00	00	02	01	00	-	No
	Sub Total Allied Agri. Services	07	00	06	01	00	06	01	00	02	04	01	-	No
C.	Both Agri. + Dairy Services													
I	Marginal Farmers	25	04	18	03	04	18	03	02	02	06	15	-	No
II	Small Farmers	16	03	13	00	03	13	00	00	04	05	07	-	No
III	Medium & Large Farmers	19	03	16	00	03	16	00	02	07	04	06	-	No
	Sub Total Both Agri.+ Dairy Services	60	10	47	03	10	47	03	04	13	15	28	-	No
	G. Total Beneficiaries	100	17	76	07	17	76	07	11	27	26	36	-	No

Thus, in all the categories of beneficiaries OBCs were dominating under the ACABC Scheme in U.P. Accordingly among the castes, the maximum i.e. 76 were of backward castes, 17 were of upper castes and 7 were of schedules castes in the area under study. In the three categories also the domination of OBCs was maximum. About educational status of the beneficiaries it was found that on an overall there were 11 post graduates, 27 graduates, 26 H.S. and +2 and the maximum i.e. 36 were non-matric. Thus, the level of education among beneficiaries was considerable in the area under study. No training was reported to beneficiaries by ventures. The related data area given in Table V-2.

V.3. Details of Crops Grown by the Sample Beneficiaries under ACABC Scheme in U.P.

V.3.1. Category-wise details of Crops grown in Kharif Season by the Sample Beneficiaries Farmers under ACABC Scheme in U.P.

The category-wise details of crops grown in kharif season by sample beneficiary farmers under ACABC Scheme analysed in Table V-3 shows that on an overall average the areas under kharif cereals was estimated as 0.95 ha and the total area was irrigated under the various categories it was higher i.e. 1.09 ha under allied agri-services, against the lowest i.e. 0.81 ha. under proper agri. Services. While under agri. + dairy services it was estimated as 1.02 ha and total was irrigated. Thus, area under kharif cereals was comparatively higher on the farms under allied agri-services in the area under study. While the area under kharif pulses was estimated as 0.39 ha. per beneficiary and was comparatively higher under proper agri-services against lowest under agri.+ dairy services. The area under other crops including horticultural crops was estimated as 0.85 ha. per beneficiary and was slightly higher on the farms under allied agri-services. Thus, the gross cropped area during kharif season was estimated as 1.63 ha. and the total was irrigated. The category-wise distribution shows that it was comparatively higher i.e. 2.12 ha on the farms under allied agri.-services against the lowest i.e. 1.22 ha per beneficiary farm under proper agri. Services. The related data are given in Table-V-3

Table-V-3
Category-Wise Details of Crops Grown in Kharif Season by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Area in Hect./ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Cereals Area		Pulses Area		Others including Horticulture Crops Area		Total Kharif Crops Area	
			Irri.	Total	Irri.	Total	Irri.	Total	Irri.	Total
A.	Proper Agri. Services									
I	Marginal Farmers	23	0.48	0.48	0.00	0.00	0.21	0.21	0.56	0.56
II	Small Farmers	07	1.15	1.15	0.40	0.40	0.23	0.23	1.60	1.60
III	Medium & Large Farmers	03	2.50	2.50	1.00	1.00	2.27	2.27	5.43	5.43
	Sub Total Proper Agri. Services	33	0.81	0.81	0.57	0.57	0.60	0.60	1.22	1.22
B.	Allied Agri. Services									
I	Marginal Farmers	03	0.37	0.37	0.25	0.25	0.38	0.38	0.70	0.70
II	Small Farmers	01	1.00	1.00	0.00	0.00	0.25	0.25	1.25	1.25
III	Medium & Large Farmers	03	1.83	1.83	0.50	0.50	1.50	1.50	3.83	3.83
	Sub Total Allied Agri. Services	07	1.09	1.09	0.44	0.44	0.92	0.92	2.12	2.12
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	25	0.60	0.60	0.10	0.10	0.28	0.28	0.24	0.24
II	Small Farmers	16	1.13	1.13	0.10	0.10	0.43	0.43	1.54	1.54
III	Medium & Large Farmers	19	1.47	1.47	0.31	0.31	1.93	1.93	3.42	3.42
	Sub Total Both Agri.+ Dairy Services	60	1.02	1.02	0.25	0.25	0.99	0.99	1.80	1.80
	G. Total Beneficiaries	100	0.95	0.95	0.39	0.39	0.89	0.89	1.63	1.63

V.3.2. Category-wise Details of Crops grown during Rabi Season by beneficiary farmers under ACABC Scheme

Category-wise details of crops grown in Rabi season by sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-4 shows that on an average the area under rabi-cereals was estimated 050.99 ha. per beneficiary and the total was irrigated. The distribution under different categories of farmers it was found that the area under rabi cereals was comparatively higher i.e. 1.25 ha per beneficiary under allied agri services against the lowest i.e. 0.83 ha under proper agri.- services. Thus, area under rabi cereals was allocated comparatively more under allied agri.-services than that under the other services by the beneficiary farmers in

the area under study. While the area under Rabi pulses was estimated slightly higher on the farms under proper agri. services and was estimated as 0.42 ha per beneficiary on an average in the area under study. The area under other crops including horticultural crops was estimated as 0.94 ha. per farm on an average and was estimated to be comparatively higher i.e. 1.05 ha. per farm under agri. + dairy services against the lowest i.e. 0.66 ha. on the farms under proper agri. Services. Thus, the gross cropped area during the rabi season was equally /fully covered on the farms of beneficiaries under the various services under the area under study. The related data are given in Table V-4.

Table-V-4
Category-Wise Details of Crops Grown in Rabi Season by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Area in Hect./ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Cereals Area		Pulses Area		Others including Horticulture Crops Area		Total Rabi Crops Area	
			Irri.	Total	Irri.	Total	Irri.	Total	Irri.	Total
A.	Proper Agri. Services									
I	Marginal Farmers	23	0.51	0.51	0.25	0.25	0.13	0.13	0.56	0.56
II	Small Farmers	07	1.15	1.15	0.30	0.30	0.33	0.33	1.60	1.60
III	Medium & Large Farmers	03	2.50	2.50	1.00	1.00	2.27	2.27	5.43	5.43
	Sub Total Proper Agri. Services	33	0.83	0.83	0.47	0.47	0.66	0.66	1.22	1.22
B.	Allied Agri. Services									
I	Marginal Farmers	03	0.50	0.50	0.25	0.25	0.28	0.28	0.70	0.70
II	Small Farmers	01	1.00	1.00	0.00	0.00	0.25	0.25	1.25	1.25
III	Medium & Large Farmers	03	1.83	1.83	0.50	0.50	1.50	1.50	3.83	3.83
	Sub Total Allied Agri. Services	07	1.25	1.25	0.44	0.44	0.80	0.80	2.12	2.12
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	25	0.66	0.66	0.00	0.00	0.27	0.27	0.74	0.74
II	Small Farmers	16	1.07	1.07	0.00	0.00	0.54	0.54	1.54	1.54
III	Medium & Large Farmers	19	1.53	1.53	0.33	0.33	1.89	1.89	3.42	3.42
	Sub Total Both Agri.+ Dairy Services	60	1.05	1.05	0.33	0.33	1.05	1.05	1.80	1.80
	G. Total Beneficiaries	100	0.99	0.99	0.42	0.42	0.94	0.94	1.63	1.63

V.3.3 Category-wise Details of Crops grown during Zaid Season by Beneficiary Farmers under ACABC Scheme

The category-wise details of crops grown during zaid season by sample beneficiary farmers under ACABC scheme in U.P. worked-out in Table V-5 shows that no zaid cereal was grown by any of the sample beneficiary farmers in the area under study. Also zaid pulses were grown in meagere area only by a few medium and large farmers under agri.+ dairy services and under proper agri. services by only a few marginal farmers in the area under study. Other crops including horticultural crops were found to be grown by the farmers under all the services and were estimated as 0.63 ha. on an average per farmer.

Table-V-5
Category-Wise Details of Crops Grown in Zaid Season by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Cereals Area		Pulses Area		Others including Horticulture Crops Area		Total Zaid Crops Area	
			Irri.	Total	Irri.	Total	Irri.	Total	Irri.	Total
A.	Proper Agri. Services									
I	Marginal Farmers	23	0.00	0.00	0.15	0.15	0.26	0.26	0.23	0.23
II	Small Farmers	07	0.00	0.00	0.00	0.00	0.49	0.49	0.49	0.49
III	Medium & Large Farmers	03	0.00	0.00	0.00	0.00	1.25	1.25	1.25	1.25
	Sub Total Proper Agri. Services	33	0.00	0.00	0.15	0.15	0.48	0.48	0.42	0.42
B.	Allied Agri. Services									
I	Marginal Farmers	03	0.00	0.00	0.00	0.00	0.50	0.50	0.50	0.50
II	Small Farmers	01	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.20
III	Medium & Large Farmers	03	0.00	0.00	0.00	0.00	0.83	0.83	0.83	0.83
	Sub Total Allied Agri. Services	07	0.00	0.00	0.00	0.00	0.64	0.64	0.64	0.64
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	25	0.00	0.00	0.00	0.00	0.46	0.46	0.46	0.46
II	Small Farmers	16	0.00	0.00	0.00	0.00	0.71	0.71	0.71	0.71
III	Medium & Large Farmers	19	0.00	0.00	1.00	1.00	0.88	0.88	0.94	0.94
	Sub Total Both Agri.+ Dairy Services	60	0.00	0.00	1.00	1.00	0.66	0.66	0.68	0.68
	G. Total Beneficiaries	100	0.00	0.00	0.36	0.36	0.63	0.63	0.62	0.62

The category-wise distribution shows that the area under other zaid crop including horticultural crops was found to be grown in comparatively slightly larger area i.e. 0.66 ha. on the farms under agri. + dairy services against the lowest i.e. 0.48 ha. on the farms under proper agri.-services in the area under the study. Thus, farmers under agri. + dairy services had allocated higher area under other zaid crops including horticultural crops in the area under study. Accordingly the gross cropped area during zaid season was estimated as 0.62 ha per farm on an overall average and it was comparatively higher i.e. 0.68 ha per farm under agri. + dairy services against lowest i.e. 0.42 ha. per farm under proper agri.-services in the area under study. The related data are given in table V-5.

V.4 Details of Seasonal Gross Irrigated and Gross Cropped Area on the Farms of Beneficiary Farms under ACABC Scheme in U.P.

The category-wise details of seasonal gross irrigated and cropped area on the farms of sample beneficiary farmers under ACABC Scheme in U.P. analysed in Table V-6 indicates that on an average the total irrigated area during Kharif as well as Rabi season each was estimated as 1.63 ha per beneficiary farm. While during Zaid season it was estimated as 0.62 ha. per farm. Thus, the gross irrigated area on an overall average was estimated as 3.75 ha. which was estimated to be highest i.e. 4.70 ha on the farms of allied agri.-services against the lowest i.e. 2.65 ha. per farm under proper agri.-services in the area under study. While the the total cropped area per farm during Kharif, Rabi and Zaid seasons were estimated as the same as in case of irrigated area. This very well confirms that the total cropped area was irrigated in the area under the study. Accordingly the gross cropped area was estimated as equal as gross irrigated area on an average in the area under study. The related data are given in table V-6.

Table-V-6
Category-Wise Details of Seasonal Total Irrigated and Cropped Area on the Farms of
Sample Beneficiary Farmers under ACABC Scheme in U.P.

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Total Irrigated Area			Gross Irrigated Area	Total Cropped Area			Gross Cropped Area
			Kharif	Rabi	Zaid		Kharif	Rabi	Zaid	
A.	Proper Agri. Services									
I	Marginal Farmers	23	0.56	0.56	0.23	1.22	0.56	0.56	0.23	1.22
II	Small Farmers	07	1.60	1.60	0.49	3.48	1.60	1.60	0.49	3.48
III	Medium & Large Farmers	03	5.43	5.43	1.25	11.70	5.43	5.43	1.25	11.70
	Sub Total Proper Agri. Services	33	1.22	1.22	0.42	2.65	1.22	1.22	0.42	2.65
B.	Allied Agri. Services									
I	Marginal Farmers	03	0.70	0.17	0.50	1.57	0.70	0.70	0.50	1.57
II	Small Farmers	01	1.25	1.25	0.20	2.70	1.25	1.25	0.20	2.70
III	Medium & Large Farmers	03	3.83	3.83	0.83	8.50	3.83	3.83	0.83	8.50
	Sub Total Allied Agri. Services	7	2.12	2.12	0.64	4.70	2.12	2.12	0.64	4.70
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	25	0.74	0.74	0.46	1.91	0.74	0.74	0.46	1.91
II	Small Farmers	16	1.54	1.54	0.71	3.70	1.54	1.54	0.71	3.70
III	Medium & Large Farmers	19	3.42	3.42	0.94	7.77	3.42	3.42	0.94	3.42
	Sub Total Both Agri.+ Dairy Services	60	1.80	1.80	0.68	4.25	1.80	1.80	0.68	4.25
	G. Total Beneficiaries	100	1.63	1.63	0.62	3.75	1.63	1.63	0.62	3.75

V.5. Details of Inputs and Outputs of Crops in All the Seasons on the Farms of Beneficiary Farmers under ACABC Scheme in U.P.

V.5.1. Category-Wise Details of total Inputs, Outputs and Net Incomes from All Crops on the Farms of the Sample Beneficiary Farmers under ACABC Scheme in U.P.

The categories-wise details of inputs and outputs of Kharif crops on the farms of sample beneficiary farmers under ACABC Scheme in U.P. analysed in Table V-7 indicates that on an overall average the total outputs from Kharif crops was estimated to Rs. 66,012 per farm of which Rs. 45,240 was on account of cereals, Rs 10,829 was from pulses and Rs 9,943 was received from other crops. While the total inputs per farm was estimated to Rs 42,750 of which the maximum i.e. Rs 27,291 was incurred on other inputs and Rs 15,459 on own inputs. Thus, among the Kharif crops the maximum output was received from cereal crops against the minimum outputs from other crops. Accordingly the inputs were also incurred maximum on cereal crops on an overall average on the farms of sample beneficiary farmers. Thus, cereals

were more profitable among crops. While the category-wise analysis indicates that outputs per farm was accounted to be comparatively maximum i.e. Rs 77,186 in case of the beneficiary farmers of allied agricultural services against the minimum i.e. Rs 64,276 per farm in case of the beneficiary farmers of proper agricultural services. While in case of the beneficiary farmers of both agri+ dairy services the outputs per farm was estimated as Rs 65,063. Thus, beneficiary farmers of allied agricultural services had received comparatively higher outputs as well as profit and as such ACABC Scheme performed better in cases of allied agri. services to the farmers. Accordingly inputs incurred on the farms of beneficiaries were found to be high i.e. Rs 46,713 in cases of the farmers of allied agricultural services against lowest i.e. Rs 39,599 per farm in cases of the farmers of proper agricultural services. Thus, beyond the higher inputs the farms of allied agricultural services were comparatively more profitable than the farms of proper agri. services as well as dairy + agri. services in the area under study. On the other hand, among the kharif crops, cereals were comparatively more profitable in cases of the farmers under the category of both Dairy+ agri. services wherein the maximum outputs per farm was accounted as Rs 50,816 against the minimum i.e. Rs 34,327 per farm in the category of proper agri. services, While, in case of pulses the outputs per farm was maximum i.e. Rs 17,043 in the category of proper agri. services against the minimum i.e. Rs 5,211 per farm in the category of both agri+ dairy services. But in case of other kharif crops the outputs per farm was comparatively higher in the category of allied agri. services against the lowest output per farm i.e. Rs 9036 in the category of both agri+ dairy services in the area under study. Thus, it is safely concluded that conditions of both Agri+ dairy services category was favourable for cereals, proper agri. services for pulses and allied agri. services for other Kharif crops in U.P. under ACABC Scheme. The related data are given in Table V-7

V.5.2: Category-Wise Details of Inputs, Outputs of Rabi Crops on the Farms of the Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of inputs and outputs of rabi crops on the farms of sample beneficiary farmers under ACABC Scheme in U.P. analysed in Table V-8 indicates that on an overall average the gross outputs from the Rabi crops was accounted Rs 10,452 per farm of which the maximum i.e. Rs 51,793 was on account of other crops against the minimum i.e. Rs 11,175 on account of pulses. While the total outputs from cereal crops was accounted as Rs 41,184 per

farm. Thus, the outputs in case of Rabi crops was found to be comparatively much higher from the other crops which shows that during Rabi season other crops were paid more attention by the sample beneficiary farmers under ACABC Scheme in the area under study. Regarding inputs incurred on Rabi crops it was found that on an overall average the gross inputs perform was accounted as Rs 74,459 of which Rs 48,375 were incurred on other inputs and Rs 26,084 on own inputs. Thus, it is clarified that beneficiary farmers had invested more on other inputs which were purchased from the agri-ventures established in their areas under ACABC Scheme in U.P. The crop-wise analysis of inputs shows that on an overall average the maximum inputs i.e. Rs 27899 accounted on Rabi cereals against the minimum inputs per farm i.e. Rs 5,617 on pulses. While on the other crops it was accounted as Rs. 26,279 per farm. Thus, inputs per farm were incurred maximum on Rabi cereals as compared to that on pulses and other crops in the area under study.

The category-wise analysis shows that the average gross output from Rabi crops was accounted to be maximum i.e. Rs 1,25,445 per farm in case of both agri+ dairy services against the minimum i.e. Rs. 56,274 per farm in case of proper agri. services. While in case of allied agri. service it was accounted as Rs 67,983 per farm. Thus, the farms under both agri+dairy services were comparatively more profitable having maximum outputs per farm. Accordingly the gross inputs per farm was also incurred maximum i.e. Rs 63,966 on the farms under both agri+ dairy services in comparison of the farms under proper agri. services and allied agri. services where it was Rs. 32, 183 per farm and Rs 46,458 per farm respectively. Among the crops also, it was on the same pattern as was found on the aggregate level. The related data area given in Table V.8 .

Table-V-7

Category-Wise Details of Inputs and Outputs of Kharif Crops on the Farms of Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Inputs in Rs, Outputs in Rs/Beneficiary)

Sl.No	Category of Beneficiary Farmers	No. of Samples	Cereals				Pulses				Others				Total Kharif Crops			
			Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)
			Own	Others	Total		Own	Others	Total		Own	Others	Total		Own	Others	Total	
A.	Proper Agri. Services																	
I	Marginal Farmers	23	7917	7711	15628	21787	0	0	0	0	2400	1013	3413	6275	10317	8724	19041	28062
II	Small Farmers	07	10963	21664	32627	46671	1190	4020	5210	12260	1250	1790	3040	6860	13403	27474	40877	65791
III	Medium & Large Farmers	03	49000	27500	76500	101667	2925	9250	12175	29000	20667	5833	26500	40667	72592	42583	115175	171334
	Sub Total Proper Agri. Services	33	12298	12470	24768	34327	1686	5514	7200	17043	5466	2159	7625	12906	19450	20143	39593	64276
B.	Allied Agri. Services																	
I	Marginal Farmers	03	6333	4733	11066	15000	800	2500	3300	6000	2250	2300	4550	9250	9383	9533	18916	30250
II	Small Farmers	01	33000	2000	35000	49800	0	0	0	0	3000	2000	5000	12000	36000	4000	40000	61800
III	Medium & Large Farmers	03	21000	36667	57667	84333	1867	4733	6600	16667	3750	5400	9150	18500	26617	46800	73417	119500
	Sub Total Allied Agri. Services	07	16429	18029	34458	49686	1600	4175	5775	14000	3000	3480	6480	13500	21029	25684	46713	77186
C.	Both Agri. + Dairy Services																	
I	Marginal Farmers	25	5930	14574	20504	30562	1000	300	1300	3600	1453	2742	4195	5193	8383	17616	25999	39355
II	Small Farmers	16	10269	27169	37438	54169	1000	550	1550	4700	3283	4169	7452	8915	14552	31888	46440	67784
III	Medium & Large Farmers	19	13466	36555	50021	73576	1086	2050	3136	5587	2758	4886	7644	12207	17310	43491	60801	91370
	Sub Total Both Agri.+ Dairy Services	60	9533	25068	34601	50816	1060	1575	2635	5211	2278	4069	6347	9036	12871	30712	43583	65063
	G. Total Beneficiaries	100	10943	20371	31314	45240	1371	3383	4754	10829	3145	3537	6682	9943	15459	27291	42750	66012

Table-V-8
Category-Wise Details of Inputs and Outputs of Rabi Crops on the Farms of Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Inputs in Rs, Outputs in Rs/ Beneficiary)

Sl.No	Category of Beneficiary Farmers	No. of Samples	Cereals				Pulses				Others				Total Rabi Crops			
			Inputs (Rs)			Output (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)
			Own	Others	Total		Own	Others	Total		Own	Others	Total		Own	Others	Total	
A.	Proper Agri. Services																	
I	Marginal Farmers	23	6738	7228	13966	20065	3000	1200	4200	6300	2817	917	3734	8067	12555	9345	21900	34432
II	Small Farmers	7	8675	18521	27196	42699	970	3050	4020	9760	1820	1720	3540	8980	11465	23291	34756	61439
III	Medium & Large Farmers	3	58067	17000	75067	102000	2475	9750	12225	34500	2350	2050	4400	8250	62892	28800	91692	144750
	Sub Total Proper Agri. Services	33	11815	10512	22327	32315	1600	4494	6094	15513	2362	1400	3762	8446	15777	16406	32183	56274
B.	Allied Agri. Services																	
I	Marginal Farmers	3	4000	10000	14000	15750	1500	1500	3000	4500	2550	1850	4400	8300	8050	13350	21400	28550
II	Small Farmers	1	31500	1500	33000	49000	0	0	0	0	5000	4000	9000	19000	36500	5500	42000	68000
III	Medium & Large Farmers	3	40000	11667	51667	74333	3033	3067	6100	9433	1550	2750	4300	5650	44583	17484	62067	89416
	Sub Total Allied Agri. Services	7	26583	9417	36000	50583	2650	2675	5325	8200	2625	2508	5133	9200	31858	14600	46458	67983
C.	Both Agri. + Dairy Services																	
I	Marginal Farmers	25	5814	13361	19175	28011	0	0	0	0	1547	3907	5454	15162	7361	17268	24629	43173
II	Small Farmers	16	7760	29915	37675	44360	1000	400	1400	3500	5251	8105	13356	25615	14011	38420	52431	73475
III	Medium & Large Farmers	19	11349	33175	44524	67750	3258	2620	5878	8655	19266	50069	69335	134518	33873	85864	119737	210923
	Sub Total Both Agri.+ Dairy Services	60	13362	31936	30194	45257	3258	2303	5561	7919	10463	2644	36769	72269	27083	36883	63966	125445
	G. Total Beneficiaries	100	15847	26850	27899	41184	2313	3304	5617	11175	7924	18221	26279	51793	26084	48375	74459	104152

V.5.3. Category- Wise Details of Inputs and Outputs of Zaid Crops on the Farms of the Sample Beneficiary Farmers under ACABC Scheme in U.P.

The Category- wise details of inputs and outputs of zaid crops on the farms of the sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-9 shows that on an overall the gross outputs per farm was accounted as Rs 18,309. While the total inputs were accounted as Rs 12,049 of which Rs 5,981 was on account of own inputs and Rs 6,068 was on account of other inputs on an overall average. The gross outputs from zaid cereals was nil as no zaid cereal crop was grown on any farm of any category of sample farmers in the area under the study. Thus, it is evidently clarified that during zaid season only a few pulses and other crops were grown in the whole area under the study. The category-wise analysis indicates that on an overall average the maximum output per farm i.e. Rs. 30,494 was accounted on the farms under the category of both agri.+ dairy services against the minimum i.e. Rs 12,555 per farm under the proper agri. services. While on the farms under allied agri. services, it was accounted as Rs.17,800 per farm on an overall average in the area under study. Thus, it is very well clarified that the farms under both agri.+ dairy services were more productive and profitable as compared to the farms under proper agri. as well as allied agri. services. Accordingly the gross inputs per farm was also found to be maximum i.e. Rs. 19,120 on the farms under both agri.+ dairy services in comparison of the farms under proper agri. services and allied agri. services, where the inputs incurred per farm were accounted as Rs. 8,761 and Rs.12,800 per farm respectively. Thus, the farms under the category of both agri.+ dairy services were found to be more expensive than the farms under the other two categories in the area under study. Among the crops, pulses were grown only on a few marginal and medium farms of proper agri. services on a few medium farms of both agri,+ dairy services, while other crops were grown under all the categories. But the outputs per farm were accounted to be maximum i.e. Rs. 17,800 on the farms under allied agri. services against the minimum i.e. Rs 12,255 under proper agri. services. While under both agri.+ dairy services it was accounted as Rs. 30,494 per farm. Thus, it is safely concluded that in zaid season the farms under dairy + agri. services were profitable in the area under study. The related data are given in Table-V-9.

Table-V-9
Category-Wise Details of Inputs and Outputs of Zaid Crops on the Farms of Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Inputs in Rs, Outputs in Rs/ Beneficiary)

Sl.No	Category of Beneficiary Farmers	No. of Samples	Cereals				Pulses				Others				Total Zaid Crops			
			Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)
			Own	Others	Total		Own	Others	Total		Own	Others	Total		Own	Others	Total	
A.	Proper Agri. Services																	
I	Marginal Farmers	23	0	0	0	0	1467	667	2134	3400	1770	2590	4360	6260	3237	3257	6494	9660
II	Small Farmers	7	0	0	0	0	0	0	0	0	1400	4250	5650	7400	1400	4250	5650	7400
III	Medium & Large Farmers	3	0	0	0	0	0	0	0	0	5250	9000	14250	18250	5250	9000	14250	18250
	Sub Total Proper Agri. Services	33	0	0	0	0	1467	667	2134	3400	2268	4359	6627	8855	3735	5026	8761	12255
B.	Allied Agri. Services																	
I	Marginal Farmers	3	0	0	0	0	0	0	0	0	3000	6000	9000	12000	3000	6000	9000	12000
II	Small Farmers	1	0	0	0	0	0	0	0	0	6000	4000	10000	25000	6000	4000	10000	25000
III	Medium & Large Farmers	3	0	0	0	0	0	0	0	0	6500	8500	15000	17333	6500	8500	15000	17333
	Sub Total Allied Agri. Services	7	0	0	0	0	0	0	0	0	5700	7100	12800	17800	5700	7100	12800	17800
C.	Both Agri. + Dairy Services																	
I	Marginal Farmers	25	0	0	0	0	0	0	0	0	1173	3383	4556	6259	1173	3383	4556	6259
II	Small Farmers	16	0	0	0	0	0	0	0	0	2088	5263	7351	11333	2088	5263	7351	11333
III	Medium & Large Farmers	19	0	0	0	0	10000	2000	12000	20000	3218	6861	10079	15092	13218	8861	22079	35092
	Sub Total Both Agri.+ Dairy Services	60	0	0	0	0	10000	2000	12000	20000	2096	5024	7120	10494	12096	7024	19120	30494
	G. Total Beneficiaries	100	0	0	0	0	3600	1000	4600	7550	2381	5068	7449	10759	5981	6068	12049	18309

V.5.4 Category-Wise Details of total Inputs, Outputs and Net Incomes from All Crops on the Farms of the Sample Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details of total inputs, outputs and net incomes from all crops on the farms of the sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-10 shows that on an overall average the gross output from all crops was accounted as Rs 1,88,473. While the gross inputs from all crops was accounted to Rs. 1,29,258 per farm.

Table-V-10
Category-Wise Details of total Inputs, Outputs and Net Incomes from All Crops on the Farms of the Sample Beneficiary Farmers under ACABC Scheme in U.P.

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Gross Inputs (Rs)			Gross Outputs (Rs)	Net Incomes (Rs)
			Own	Others	Total		
(Inputs in Rs. & Outputs in Rs/ Beneficiary)							
A.	Proper Agri. Services						
I	Marginal Farmers	23	26,109	21,326	47,435	72,154	24,719
II	Small Farmers	07	26,268	55,015	81,283	1,34,630	53,347
III	Medium & Large Farmers	03	1,40,734	80,383	2,21,117	3,34,334	1,13,217
	Sub Total Proper Agri. Services	33	38,962	41,575	80,537	1,32,805	52,268
B.	Allied Agri. Services						
I	Marginal Farmers	03	20,433	28,883	49,316	70,800	21,484
II	Small Farmers	01	78,500	13,500	92,000	1,54,800	62,800
III	Medium & Large Farmers	03	77,700	72,784	1,50,484	2,26,249	75,765
	Sub Total Allied Agri. Services	07	58,587	47,384	1,05,971	1,62,969	56,998
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	16,919	38,267	55,186	88,787	33,601
II	Small Farmers	16	30,651	75,571	1,06,222	1,52,292	46,070
III	Medium & Large Farmers	19	64,401	1,38,216	2,02,617	3,37,385	1,34,768
	Sub Total Both Agri.+ Dairy Services	60	52,050	74,619	1,26,669	2,21,002	94,333
	G. Total Beneficiaries	100	47,524	81,734	1,29,258	1,88,473	59,215

Thus, the net income per farm was accounted as Rs. 59,215 on an overall average. Among the inputs, the other inputs procured from agri. ventures or elsewhere was higher than the own inputs. This confirms that the sample farmers had availed the services of agri.-ventures in their area. The category-wise analysis indicates that the maximum net income i.e. Rs.94,333 Per farm was accounted on the farms under both dairy + agri. services against the minimum net income i.e. Rs 52,268 on the farms under proper agri. services. While on the farms under allied service

the average net income per farm was accounted as Rs 56,998. Thus, the farms under both dairy + agri. services were comparatively more profitable as the outputs per farm were comparatively much higher on the farms under both dairy + agri. services in the area under study. The related data are given in Table V-10.

V.5.5 Category-Wise Details of Inputs, Outputs and Net Incomes from Milch Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of inputs, outputs and Net Incomes from milch animals reared by sample beneficiary farmers under ACABC scheme in U.P. analysed in Table V-11 indicates that on an overall average the outputs from milch animals per farm was accounted as Rs. 1,13,607. While the inputs incurred in rearing milch animals was estimated as Rs. 87,994 of which the maximum i.e. 65,132 was incurred on other inputs and Rs.18,886 on own inputs. Thus, the net income from milch animals was accounted as Rs. 25,613 per farm which is a considerable income in addition to raising crops on the farms of beneficiaries in the area under study.

The category-wise analysis indicates that the maximum outputs i.e. Rs. 1,52,000 per farm was received under the category of allied agri. services against the outputs of Rs. 91,326 per farm under the category of proper agri. services. While in the category of both agri.+ dairy it was estimated as Rs. 1,16,723 per farm. Thus, the farms under allied agri. services were more productive and profitable in comparison of the farms under both agri. dairy services as well as proper agri. services in rearing milch animals in the area under the study, because the net income per farm was estimated maximum i.e. Rs. 42,500 under the category of allied agri. services. Accordingly the total inputs per farm were incurred maximum i.e. Rs. 1,10,500 per farm against the minimum i.e. Rs. 75,947 per farm on the farms under proper agri. services and Rs. 89,558 per farm under both agri.+ dairy services in the area under study. Therefore, it is safely concluded that rearing milch animals on the farms along with the other services was considerably profitable in the area under study. The related data are given in the Table V-11.

Table-V-11
Category-Wise Details of Inputs, Outputs and Net Incomes from Milch Animals Reared by
Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Inputs in Rs. &Outputs in Rs/ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own Sources	Others Sources	Total (Rs)		
A.	Proper Agri. Services						
I	Marginal Farmers	23	21,063	54,375	75,438	87,763	12,325
II	Small Farmers	07	11,500	41,500	53,000	65,500	12,500
III	Medium & Large Farmers	03	2,000	1,28,000	1,30,000	2,00,000	70,000
	Sub Total Proper Agri. Services	33	19,053	56,895	75,947	91,326	15,379
B.	Allied Agri. Services						
I	Marginal Farmers	03	40,500	85,500	1,26,000	1,76,900	50,900
II	Small Farmers	01	3,000	1,05,000	1,08,000	1,26,000	18,000
III	Medium & Large Farmers	03	33,900	67,100	1,01,000	1,46,067	45,067
	Sub Total Allied Agri. Services	07	30,950	79,550	1,10,500	1,53,000	42,500
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	15,448	66,800	82,248	1,05,680	23,432
II	Small Farmers	16	18,375	77,594	95,969	1,21,519	25,550
III	Medium & Large Farmers	19	19,863	74,021	93,884	1,26,689	32,805
	Sub Total Both Agri.+ Dairy Services	60	17,627	71,965	89,558	1,16,723	27,165
	G. Total Beneficiaries	100	18,886	69,132	87,994	1,13,607	25,613

V.5.6. Category-Wise Details of Inputs, Outputs from Draught Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of inputs and outputs from draught animals reared by sample beneficiary farmers under ACABC scheme in U.P. analysed in Table V-12 shows that on an overall average the outputs from draught animals reared was accounted as Rs 4,964 per farm. While the inputs was incurred as Rs. 3,559 per farm of which the total Rs. 3,559 was own inputs on an average. Thus, the net income received from the rearing draught animals was estimated as Rs. 1,405 only per farm which confirms that the rearing of draught animals was generally either in distress or in force of milch animals.

Table-V-12
Category-Wise Details of Inputs and Outputs from Draught Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	23	6,894	0	6,894	12,088	5,194
II	Small Farmers	07	4,000	0	4,000	5,000	1,000
III	Medium & Large Farmers	03	5,000	0	5,000	5,500	500
	Sub Total Proper Agri. Services	33	6,195	0	6,195	11,020	4,825
B.	Allied Agri. Services						
I	Marginal Farmers	03	6,450	0	6,450	7,000	550
II	Small Farmers	01	2,000	0	2,000	2,500	500
III	Medium & Large Farmers	03	4,933	0	4,933	5,300	367
	Sub Total Allied Agri. Services	07	4,950	0	4,950	3,142	-1,808
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	1,714	0	1,714	2,543	829
II	Small Farmers	16	3,843	0	3,843	4,932	1,089
III	Medium & Large Farmers	19	3,513	0	3,513	5,403	1,890
	Sub Total Both Agri.+ Dairy Services	60	2,840	0	2,840	4,105	1,265
	G. Total Beneficiaries	100	3,559	0	3,559	4,964	1,405

The category-wise analysis shows that the maximum output i.e. Rs 11,020 per farm was accounted on the farm under proper agri. services against the minimum i.e. Rs. 3,142 per farm on the farm under allied agri. services. While on the farms under both agri.+ dairy services it was estimated as Rs 4,105 per farm. Thus, the farms under proper agri. services had received maximum return from rearing draught animals. But the farm under allied agri. services were in loss of Rs 18,08 per farms which very well confirms that rearing draught animals in all the categories of farmers was quite uneconomic as it was done under distress of rearing milch animals in the area under study. This condition is also supported by the fact that no other inputs were incurred in rearing the draught animals in the area under study. The related data are given in Table V-12.

V.5.7 Category-Wise Details of Inputs and Outputs from other Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details of inputs and outputs from other animals reared by sample beneficiary farmers under ACABC scheme in U.P. analysed in Table V-13 indicates that on an overall average the outputs per farm from rearing other animals was accounted as Rs 3,142. While the inputs per farm was accounted as Rs 2,698 on an average of which the total inputs was own inputs as no other input was incurred by any of the sample beneficiary farmers in the area under study on other animals also. Thus, there was a nominal net income of Rs 444 per farm only which confirms that the net income was quite negligible from rearing other animals too in the area under study.

Table-V-13
Category-Wise Details of Inputs and Outputs from other Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Inputs in Rs. & Outputs in Rs/ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	23	2,075	0	2,075	2,267	192
II	Small Farmers	07	3,000	0	3,000	3,500	500
III	Medium & Large Farmers	03	00	0	00	00	00
	Sub Total Proper Agri. Services	33	2,207	0	2,207	2,443	236
B.	Allied Agri. Services						
I	Marginal Farmers	03	3,500	0	3,500	4,500	1,000
II	Small Farmers	01	00	0	00	00	00
III	Medium & Large Farmers	03	3,500	0	3,500	4,000	500
	Sub Total Allied Agri. Services	07	3500	0	3500	4258	7500
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	2,040	0	2,040	2,600	560
II	Small Farmers	16	2,800	0	2,800	3,360	560
III	Medium & Large Farmers	19	3,357	0	3,357	3,757	400
	Sub Total Both Agri.+ Dairy Services	60	2,806	0	2,806	3,300	494
	G. Total Beneficiaries	100	2,698	0	2,698	3,142	444

The category-wise analysis indicates that the maximum output i.e. Rs 4,250 per farm was accounted on the farms under the category of allied agri. services against the minimum i.e. Rs. 2,443 per farm on the farms under proper agri. services. While on the farms under the category of both agri.+ dairy services it was estimated as Rs. 3,300 per farm. Thus, the farms under allied agri. services had received maximum outputs in comparison of the farms under proper agri. services and both agri. +dairy services in the area under study. Accordingly, the net income per farm was found higher i.e. Rs 750 per farm under allied agri. services against the lowest i.e. Rs 236 per farm under proper agri. services. While on the farms under both agri. + dairy services it was estimated as Rs 494 per farm. Thus, the farms under allied agri. services were comparatively more profitable in rearing other animals in the area under study. The inputs per farm were accordingly higher on the farms under allied agri. services. The related data are given in Table V-13.

V.5.8. Category-Wise Details of Inputs, Outputs and Net Incomes from total Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details of inputs, outputs and net incomes from total animals reared by sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-14 indicates that on an overall average the outputs received from total animals was accounted as maximum i.e. Rs 1,64,642 per farm under allied agri. services against the minimum i.e. Rs. 1,04,789 per farm under proper agri. services. While on the farms under both agri.+ dairy services it was accounted as Rs 1,24,128 per farm. Thus, the farms under allied agri. services were found to be comparatively more productive in rearing animals on the farms as compared to that on the farms under proper agri. services as well as both agri.+ dairy services in the area under study. Accordingly the net income per farm was also estimated as higher i.e. Rs 42,192 under the category of allied agri. services against the lowest i.e. Rs. 20, 439 per farms under the category of proper agri. services. While on the farms under both agri.+ dairy services, it was accounted as Rs 28,890 per farm. Thus, the farms under allied agri. services were comparatively more profitable in rearing animals on the farms in the area under study. The overall average outputs from rearing animals was accounted as Rs 1,21,713 per farm while the total inputs per farm was estimated as Rs 94,275. Thus, the net income per farm on an overall average was estimated as Rs. 27,438 from rearing animals on the farms which confirms very wells that rearing animals on

the farms along with other agri. services was significantly profitable on the farms of sample beneficiaries under ACABC Scheme in the State of U.P. Also, the higher amount of other inputs incurred in rearing animals in comparison of own inputs indicates that agri. ventures established in the area under study under ACABC scheme have been found supplying other inputs on payment to the sample beneficiary farmers in the area under study. The related data are given in Table V-14.

Table-V-14

Category-Wise Details of Inputs, Outputs and Net Incomes from total Animals Reared by Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Inputs in Rs. & Outputs in Rs/ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	23	30,032	54,375	84,407	1,02,118	17,711
II	Small Farmers	07	18,500	41,500	60,000	74,000	14,000
III	Medium & Large Farmers	03	7,000	1,28,000	1,35,000	2,05,500	70,500
	Sub Total Proper Agri. Services	33	27,455	56,895	84,350	1,04,789	20,439
B.	Allied Agri. Services						
I	Marginal Farmers	03	50,450	85,500	1,35,950	1,88,400	52,450
II	Small Farmers	01	5,000	1,05,000	1,10,000	1,28,500	18,500
III	Medium & Large Farmers	03	42,333	67,100	1,09,433	1,53,867	44,434
	Sub Total Allied Agri. Services	07	42,900	79,550	1,22,450	1,64,642	42,192
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	19,202	66,800	86,002	1,10,823	24,821
II	Small Farmers	16	25,018	77,594	1,02,612	1,29,811	27,199
III	Medium & Large Farmers	19	26,733	74,021	1,00,754	1,35,849	35,095
	Sub Total Both Agri.+ Dairy Services	60	23,273	71,965	95,238	1,24,128	28,890
	G. Total Beneficiaries	100	25,143	69,132	94,275	1,21,713	27,438

V.6: Category-wise Details of Extension services received from Agri. Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of extension services received from Agri.-ventures by the sample beneficiary farmers under ACABC Scheme in U.P. worked out in Table-V-15 shows that out of total 100 sample beneficiary farmers 94 had reported to receive extension services from the agri. ventures of their areas. Out of 94 sample farmers who had received extension services, the maximum i.e. 41 sample farmers had reported to receive extension services on dairy and animal feeds etc. 37 had reported to receive extension services relating to farm machines etc. and 16 reported to receive extension services on production trends etc. on an overall in the area under study. The category-wise distribution of farmers receiving extension services from agri. ventures

shows that under the category of allied agri. services almost all the 7 sample farmers had received extension services. While in the category of both agri. + dairy services, 59 farmers out of 60 had received extension services. But under the category of proper agri. services 28 out of 33 had received extension services from the agri. ventures of their areas. Thus, it is evidently clear that majority of beneficiary farmers had received extension services from the agri. ventures established successfully in their areas and maximum of the farmers had received extension services on farm machines and dairy etc. in the area under study. The related data are given in Table V.15.

Table-V-15
Category-Wise Details of Extension Services received from Agri. Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

(In No. of Beneficiaries)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Extension Services Received From Ventures on				
			Farm Machine etc	Dairy Poultry Etc.	Apiary, Sericulture Etc.	Others including Production Trend Etc.	All Extension Services Received
A.	Proper Agri. Services						
I	Marginal Farmers	23	05	07	0	07	19
II	Small Farmers	07	03	02	0	01	06
III	Medium & Large Farmers	03	02	00	0	01	03
	Sub Total Proper Agri. Services	33	10	09	0	09	28
B.	Allied Agri. Services						
I	Marginal Farmers	03	02	01	0	00	03
II	Small Farmers	01	00	01	0	00	01
III	Medium & Large Farmers	03	01	01	0	01	03
	Sub Total Allied Agri. Services	07	03	03	0	01	07
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	11	08	0	06	25
II	Small Farmers	16	09	07	0	00	16
III	Medium & Large Farmers	19	04	14	0	00	18
	Sub Total Both Agri.+ Dairy Services	60	24	29	0	06	59
	G. Total Beneficiaries	100	37	41	0	16	94

V.7 Details of Hiring Machines from Agri. Ventures by Sample Beneficiary farmers under ACABC Scheme in U.P.

The category-wise details of hiring machines from ventures by the sample beneficiary farmers under ACABC Scheme in U.P. analysed in Table V-16 indicates that out of 100 sample beneficiary farmers only 49 had taken only sprayers on hiring free of any charges from the agri.

ventures of their areas. While 51 farmers had told not to hire any machines from the agri.-ventures of their areas Thus, it is clarified that the functioning of ACABC Scheme was in nascent stage in the area under study. Established agri.-ventures had just started their business and hence they were found selling inputs such as seeds fertilizers animal feeds and pesticides etc.

Table-V-16
Category-Wise Details of Hiring Machines from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Charges in Rs/ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Hired Machine from ventures		Details of Hiring Machines from Ventures							
					Machine (I)		Machine (II)		Machine (III)		All Machines	
			Yes	No	Type	Charges (Rs)	Type	Charges (Rs)	Type	Charges (Rs)	Type	Charges (Rs)
A.	Proper Agri. Services				Spray Ma.		No		No		Spray Ma.	
I	Marginal Farmers	23	08	15	Spray Ma.	0	No		No		Spray Ma.	0
II	Small Farmers	07	03	04	Spray Ma.	0	No	0	No	0	Spray Ma.	0
III	Medium & Large Farmers	03	02	01	Spray Ma.	0	No	0	No	0	Spray Ma.	0
	Sub Total Proper Agri. Services	33	13	20	Spray Ma.	0	No	0	No	0	Spray Ma.	0
B.	Allied Agri. Services											
I	Marginal Farmers	03	02	01	Spray Ma.	0	No		No		Spray Ma.	0
II	Small Farmers	01	01	00	Spray Ma.	0	No	0	No	0	Spray Ma.	0
III	Medium & Large Farmers	03	03	00	Spray Ma.	0	No	0	No	0	Spray Ma.	0
	Sub Total Allied Agri. Services	07	06	01	Spray Ma.	0	No	0	No	0	Spray Ma.	0
C.	Both Agri. + Dairy Services											
I	Marginal Farmers	25	19	06	Spray Ma.	0	No	0	No	0	Spray Ma.	0
II	Small Farmers	16	08	08	Spray Ma.	0	No	0	No	0	Spray Ma.	0
III	Medium & Large Farmers	19	03	16	Spray Ma.	0	No	0	No	0	Spray Ma.	0
	Sub Total Both Agri.+ Dairy Services	60	30	30	Spray Ma.	0	No	0	No	0	Spray Ma.	0
	G. Total Beneficiaries	100	49	51	Spray Ma.	0	No	0	No	0	Spray Ma.	0

Note: Hired only sprayers free of any charges.

V.8. Category-Wise Details of Hiring Implements from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of hiring implements from ventures by the sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-17 shows that none of the sample beneficiary farmers had been found hiring any implement from any of the agri. ventures just established in their areas. Thus, it is obviously clear that ACABC Scheme was just started in the area under study. The established agri.-ventures were in nascent stage and therefore they had not yet started hiring machine as well as implements to their beneficiaries in the area under study. The Table V-17 shows that all the entries on hiring implements are nil in it.

Table-V-17
Category-Wise Details of Hiring Implements from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Charges in Rs/ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Details of Hiring Implements from Ventures									
			Implement (I)		Implement (II)		Implement (III)		Implement (IV)		All Implements	
			Type	Charges (Rs)	Type	Charges (Rs)	Type	Charges (Rs)	Type	Charges (Rs)	Type	Charges (Rs)
A.	Proper Agri. Services											
I	Marginal Farmers	23	No	0	No	0	No	0	No	0	No	0
II	Small Farmers	07	No	0	No	0	No	0	No	0	No	0
III	Medium & Large Farmers	03	No	0	No	0	No	0	No	0	No	0
	Sub Total Proper Agri. Services	33	No	0	No	0	No	0	No	0	No	0
B.	Allied Agri. Services											
I	Marginal Farmers	03	No	0	No	0	No	0	No	0	No	0
II	Small Farmers	01	No	0	No	0	No	0	No	0	No	0
III	Medium & Large Farmers	03	No	0	No	0	No	0	No	0	No	0
	Sub Total Allied Agri. Services	07	No	0	No	0	No	0	No	0	No	0
C.	Both Agri. + Dairy Services											
I	Marginal Farmers	25	No	0	No	0	No	0	No	0	No	0
II	Small Farmers	16	No	0	No	0	No	0	No	0	No	0
III	Medium & Large Farmers	19	No	0	No	0	No	0	No	0	No	0
	Sub Total Both Agri.+ Dairy Services	60	No	0	No	0	No	0	No	0	No	0
	G. Total Beneficiaries	100	No	0	No	0	No	0	No	0	No	0

Note: None has hired any implement from any ventures, Hand weeder was hired free of any charge.

V.9. Details of Inputs on Payment Received from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of inputs on payment received from ventures by the sample beneficiary Farmers under ACABC scheme in U.P. worked out in Table V-18 shows that on an overall average the total inputs per farm was accounted as Rs 4,377 of which the maximum i.e. Rs 2,026 was on account of fertilizers, Rs 1651 on account of seeds and Rs 699 on account of other inputs per farm.

Table-V-18
Category-Wise Details of Inputs on Payment Received from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

(Input Costs in Rs/ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Seeds		Fertilizers		Others		Total Inputs	
			Crops	Costs (Rs)	Crops	Costs (Rs)	Crops	Costs (Rs)	Crops	Costs (Rs)
A.	Proper Agri. Services		Paddy+Wheat		Paddy+Wheat		Paddy+Wheat		Paddy+Wheat	
I	Marginal Farmers	23	Paddy+Wheat	1362	Paddy+Wheat	1237	Paddy+Wheat	180	Paddy+Wheat	2780
II	Small Farmers	07	Paddy+Wheat	1607	Paddy+Wheat	1637	Paddy+Wheat	875	Paddy+Wheat	4120
III	Medium & Large Farmers	03	Paddy+Wheat	1667	Paddy+Wheat	2367	Paddy+Wheat	742	Paddy+Wheat	4775
	Sub Total Proper Agri. Services	33	Paddy+Wheat	1442	Paddy+Wheat	1425	Paddy+Wheat	379	Paddy+Wheat	3245
B.	Allied Agri. Services									
I	Marginal Farmers	03	Paddy+Wheat	1133	Paddy+Wheat	2067	Paddy+Wheat	250	Paddy+Wheat	3450
II	Small Farmers	01	Paddy+Wheat	1200	Paddy+Wheat	1800	Paddy+Wheat	300	Paddy+Wheat	3300
III	Medium & Large Farmers	03	Paddy+Wheat	2533	Paddy+Wheat	2700	Paddy+Wheat	775	Paddy+Wheat	6008
	Sub Total Allied Agri. Services	07	Paddy+Wheat	1743	Paddy+Wheat	2300	Paddy+Wheat	482	Paddy+Wheat	4525
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	25	Paddy+Wheat	481	Paddy+Wheat	865	Paddy+Wheat	153	Paddy+Wheat	1498
II	Small Farmers	16	Paddy+Wheat	1078	Paddy+Wheat	1247	Paddy+Wheat	297	Paddy+Wheat	2623
III	Medium & Large Farmers	19	Paddy+Wheat	4005	Paddy+Wheat	5155	Paddy+Wheat	2391	Paddy+Wheat	11551
	Sub Total Both Agri.+ Dairy Services	60	Paddy+Wheat	1756	Paddy+Wheat	2325	Paddy+Wheat	900	Paddy+Wheat	4981
	G. Total Beneficiaries	100	Paddy+Wheat	1651	Paddy+Wheat	2026	Paddy+Wheat	699	Paddy+Wheat	4377

Thus, fertilizer was most expensive input followed by seeds in the area under study. The category-wise analysis of inputs shows that the maximum i.e. Rs 4,981 per farm was incurred in the category of both agri. + dairy services against the minimum i.e. 3,245 per farm in the category of proper agri. services. While in the category of allied agri. services it was estimated as Rs 4,525 per farm on an average. Therefore, the farms under the category of both agri. +dairy services were found to be most expensive in the area under study as compared to that under the category of proper agri. services as well as allied agri. services in the area under study. The crops grown in all the categories were commonly paddy and wheat on which the inputs were incurred as reported by the beneficiary farmers. The related data are given in Table V.18.

V.10. Category-Wise Details of Training Received from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

The category-wise details of training received from ventures by the sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-19 indicates that out of 100 sample beneficiary farmers only 29 farmers had reported to receive formal training from the ventures of their area.

Table-V-19
Category-Wise Details of Training Received from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Nature of Training		Was it Useful	
			Formal	Informal	Yes	No
A.	Proper Agri. Services					
I	Marginal Farmers	23	02	21	02	21
II	Small Farmers	07	02	05	02	05
III	Medium & Large Farmers	03	01	02	01	02
	Sub Total Proper Agri. Services	33	05	28	05	28
B.	Allied Agri. Services					
I	Marginal Farmers	03	02	01	02	01
II	Small Farmers	01	00	01	00	01
III	Medium & Large Farmers	03	01	02	01	02
	Sub Total Allied Agri. Services	07	03	04	03	04
C.	Both Agri. + Dairy Services					
I	Marginal Farmers	25	08	17	08	17
II	Small Farmers	16	05	11	05	11
III	Medium & Large Farmers	19	08	11	08	11
	Sub Total Both Agri.+ Dairy Services	60	21	39	21	39
	G. Total Beneficiaries	100	29	71	29	71

While the other 71 sample farmers had told to receive only informal training from the agri.-ventures of their areas on an overall in the area under study. Accordingly only 29 such farmers had reported the formal training to be useful for them and the remaining 71 sample farmers had reported it not at all useful for them. The category-wise distribution of training details shows that the maximum number of farmers i.e. 39 under the category of both agri.+ dairy services had told that training (informal) was not at all useful for them. While 21 farmers had told that formal training was useful for them. Maximum 28 farmers under proper agri. services had told it not at all useful for them. The related data are given in Table V-19

V.11. Details of Supports Received from Ventures by the Sample Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details of supports received from agri. ventures by the sample beneficiary farmers under ACABC scheme in U.P. worked out in Table V-20 shows that almost all the sample beneficiary farmers had reported that there was availability of inputs through the full supports of agri. ventures established in their areas. Also 66 farmers out of 100 sample beneficiaries had told to receive supports from the ventures on marketing of outputs. 42 sample farmers had told to receive other supports on the production trends from the agri. ventures of their areas on an overall average.

Among the three different categories the maximum i.e. 42 sample farmers under the category of both agri. + dairy services had reported to receive the supports on marketing of outputs from the ventures. Under proper agri. services also maximum 22 out of 33 sample farmers had told to receive supports on marketing of outputs from the ventures. The related data are given in Table-V-20.

Table-V-20
Category-Wise Details of Supports Received from Ventures by the Sample Beneficiary Farmers
under ACABC Scheme in U.P.

(In Numbers)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Availability of Inputs	Marketing of Outputs	Repairs & Maintenance	Others Supports
A.	Proper Agri. Services					
I	Marginal Farmers	23	23	16	0	11
II	Small Farmers	07	07	04	0	04
III	Medium & Large Farmers	03	03	02	0	02
	Sub Total Proper Agri. Services	33	33	22	0	01
B.	Allied Agri. Services					
I	Marginal Farmers	03	03	00	0	0
II	Small Farmers	01	01	01	0	0
III	Medium & Large Farmers	03	03	01	0	0
	Sub Total Allied Agri. Services	07	07	02	0	0
C.	Both Agri. + Dairy Services					
I	Marginal Farmers	25	25	21	0	10
II	Small Farmers	16	16	10	0	08
III	Medium & Large Farmers	19	19	11	0	07
	Sub Total Both Agri.+ Dairy Services	60	60	42	0	25
	G. Total Beneficiaries	100	100	66	0	42

V.12. Details of Extension Services and Expert Advices from Ventures which increased Income of Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details of extension services and expert advices from ventures which increased income of beneficiary farmers under ACABC scheme in U.P. analyzed in Table V-21 indicates that on an overall out of 100 sample farmers the maximum i.e. 79 farmers had reported that they had received extension services and expert advice on farm technology from agri. ventures of their areas, which really increased the income of beneficiary farmers under ACABC scheme in U.P. 68 sample beneficiaries had told about the increase in their income through the extension services received by them from the ventures of their areas on cropping practices followed by them. 66 out of 100 sample farmers reported about the expert advices on protection from pest and diseases received from ventures, which increased their income definitely.

66 farmers told about the advices from ventures on prices of crop outputs in the markets which helped to increase the income of the farmers. Also 63 farmers, out of 100 sample farmers told about the extension services on animal's health to be much helpful in increasing their income. Among the different categories of farmers similar pattern was reported on extension services and expert advices which increased income.

Table-V-21
Category-Wise Details of Extension Services and Expert Advices from Ventures which increased
Income of Beneficiary Farmers under ACABC Scheme in U.P.

(In Number of Farmers)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Advices and Extension Services on				
			Farm Technology	Cropping Practices	Protection from Pests & Diseases	Prices of Crop Outputs in Market	Animals Health Services
A.	Proper Agri. Services						
I	Marginal Farmers	23	19	19	18	16	12
II	Small Farmers	07	05	05	05	04	01
III	Medium & Large Farmers	03	03	03	03	02	03
	Sub Total Proper Agri. Services	33	27	27	26	22	16
B.	Allied Agri. Services						
I	Marginal Farmers	03	03	03	03	00	03
II	Small Farmers	01	01	01	01	01	01
III	Medium & Large Farmers	03	02	02	02	01	01
	Sub Total Allied Agri. Services	07	06	06	06	02	05
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	25	19	13	11	21	17
II	Small Farmers	16	10	10	11	10	12
III	Medium & Large Farmers	19	17	12	12	11	13
	Sub Total Both Agri.+ Dairy Services	60	46	35	34	42	42
	G. Total Beneficiaries	100	79	68	66	66	63

V.13. Details on Increase in incomes through Production of Crops and Animals on the Farms of Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details on increase in incomes through production of crops and animals on the farms of beneficiary farmers under ACABC scheme in U.P. worked out in Table V-22 shows that the majority of sample farmers i.e. 89 out of 100 sample farmers reported that the production of cereals particularly paddy in kharif and Wheat in Rabi season had increased definitely after

the implementation of ACABC Scheme in their areas on an overall. Also 21 sample farmers out of 100 sample beneficiary farmers had told that the production of milch animals had increased satisfactorily after the establishment of agri. ventures in their areas under ACABC scheme in U.P., Thus, incomes through crop production particularly cereals (Paddy & wheat) have definitely increased after the implementation of ACABC scheme in U.P. Production of milch animals has also increased and as a result the incomes of farmers have definitely increased in the area under study.

Table-V-22
Category-Wise Details on Increase in Incomes through Production of Crops and Animals on the Farms of Beneficiary Farmers under ACABC Scheme in U.P.
(Names of Crops and Animals)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Names of Crops whose production increased			Names of animals whose production increased		
			Cereals	Pulses	Others	Milch Animal	Drought Animals	Other Animals
A.	Proper Agri. Services		P +W					
I	Marginal Farmers	23	18	0	0	04	0	0
II	Small Farmers	07	05	0	0	03	0	0
III	Medium & Large Farmers	03	03	0	0	00	0	0
	Sub Total Proper Agri. Services	33	26	0	0	07	0	0
B.	Allied Agri. Services							
I	Marginal Farmers	03	03	0	0	01	0	0
II	Small Farmers	01	01	0	0	00	0	0
III	Medium & Large Farmers	03	02	0	0	01	0	0
	Sub Total Allied Agri. Services	07	06	0	0	02	0	0
C.	Both Agri. + Dairy Services							
I	Marginal Farmers	25	25	0	0	04	0	0
II	Small Farmers	16	16	0	0	05	0	0
III	Medium & Large Farmers	19	16	0	0	03	0	0
	Sub Total Both Agri.+ Dairy Services	60	57	0	0	12	0	0
	G. Total Beneficiaries	100	89	0	0	21	0	0

V.14. Details of Inputs Sales and Charges of Other Services provided by Ventures to the Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise details of inputs sales and charges of other services provided by ventures to the beneficiary farmers under ACABC scheme in U.P. worked out in Table V-23 shows that only the inputs such as seeds, fertilizers, pesticides and animal feeds were made available to the needy farmers on payment by the farmers. No other services were provided in the area under the study except a few extension services and expert advices on the inputs provided by the ventures. Thus, it is concluded that ACABC scheme was in the nascent stage in the area under study. The details of inputs costs are contained in the Table V-23.

Table-V-23
Category-Wise Details of Inputs Sales and Charges of Other Services provided by Ventures to the Beneficiary Farmers under ACABC Scheme in U.P.

(Costs of Inputs in Rs, Charges of Services in Rs./ Beneficiary)

Sl. No.	Category of Sample Beneficiary Farmers	No. of Samples	Charges of Farm Machines (Rs)	Charges of Farm Equipments	Costs of Farm Inputs (Rs.)	Charges of Other Services
A.	Proper Agri. Services					
I	Marginal Farmers	23	0	0	2,780	0
II	Small Farmers	07	0	0	4,120	0
III	Medium & Large Farmers	03	0	0	4,775	0
	Sub Total Proper Agri. Services	33	0	0	3,245	0
B.	Allied Agri. Services					
I	Marginal Farmers	03	0	0	3,450	0
II	Small Farmers	01	0	0	3,300	0
III	Medium & Large Farmers	03	0	0	6,008	0
	Sub Total Allied Agri. Services	07	0	0	4,525	0
C.	Both Agri. + Dairy Services					
I	Marginal Farmers	25	0	0	1,498	0
II	Small Farmers	16	0	0	2,623	0
III	Medium & Large Farmers	19	0	0	11,551	0
	Sub Total Both Agri.+ Dairy Services	60	0	0	4,981	0
	G. Total Beneficiaries	100	0	0	4,377	0

V.15. Category-wise Details of the Economic Status of Sample Non-Beneficiary Farmers of the ACABC Scheme Area of U.P.

Category-wise details of the economic status of sample non-beneficiary farmers of the ACABC scheme area of U.P. worked out in Table V-24 shows that the average size of holding among the non-beneficiary sample farmers was 1.70 ha. in the area under study. Out of the total 50 sample non-beneficiary farmers 44 had subsidiary occupations and 6 had reported to have memberships of the cooperative societies. Among the different categories of beneficiary farmers the size of holding was found to be higher i.e. 1.99 ha. in both agri.+ dairy services and lowest i.e. 1.16 ha. in allied agri, services. While in the category of proper agri. services the average size of holding was 1.19 ha. Thus, the holdings were comparatively larger in the category of both agri+ dairy services than that in the other two categories of sample non beneficiary farmers. Also the members of cooperatives were in this very category of both agri. + dairy services. Also those having subsidiary occupations were reported to be maximum in the category of both agri.+ dairy services. Thus, among the non-beneficiary farmers the sample farmers of both agri.+ dairy services area were comparatively more prosperous in all respects in the area of study. The related data are given in Table V-24.

Table V-24
Category-wise Details of the Economic Status of Sample Non-Beneficiary Farmers of the ACABC Scheme Area of U.P.
(Area in Hect./ Non-Beneficiary) (Main Group/Category)

Sl. No.	Category of Non-Beneficiary Farmers	No. of Samples	Area of Holding (in Hect.)	Membership of Agencies if Any		Subsidiary Occupation	
				Yes	No	Yes	No
A.	Proper Agri. Services						
I	Marginal Farmers	11	0.60	00	11	10	01
II	Small Farmers	01	2.00	00	01	01	00
III	Medium & Large Farmers	02	4.05	01	01	01	02
	Sub Total Proper Agri. Services	14	1.19	01	13	11	03
B.	Allied Agri. Services						
I	Marginal Farmers	02	0.45	0	02	02	00
II	Small Farmers	01	1.25	0	01	01	00
III	Medium & Large Farmers	01	2.50	0	01	01	00
	Sub Total Allied Agri. Services	04	1.16	0	04	04	00
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	12	0.76	02	10	12	00
II	Small Farmers	07	1.44	0	07	07	00
III	Medium & Large Farmers	13	3.42	03	10	10	03
	Sub Total Both Agri.+ Dairy Services	32	1.99	05	27	29	03
	G. Total Non-Beneficiaries	50	1.70	6	Coop	44	06

V. 16. Social and Educational Status of the Sample Non- Beneficiary Farmers of the ACABC Scheme Area of U.P.

Category-wise details of social and educational status of the sample non- beneficiary farmers of the ACABC scheme area of U.P. worked out in table V-25 indicates that on an overall average the majority of sample non-beneficiaries i.e. 37 were from OBCs (other backward castes), 10 were from general castes and only 3 were from scheduled castes. The category-wise distribution shows that the maximum OBCs were reported in the category of both agri.+ dairy services and were marginal as well as medium and large farmers. While SCs (scheduled caste) were marginal farmers in the area under study. Farmers of general castes were reported in the category of both agri.+ dairy services in maximum numbers. Accordingly the number of backward castes was maximum among the sample non-beneficiary farmers while the number of upper castes was maximum in the category of both agri.+ dairy services. The farmers of lowest castes were negligible in the area under the study.

Table V-25
Category-wise Details of Social and Educational Status of the Sample Non- Beneficiary Farmers of the ACABC Scheme Area of U.P.
(Major Group/Category)

Sl.No.	Category of Non-Beneficiary Farmers	No. of Samples	Social Groups			Caste			Educational Status			
			Gen.	OBC	SC	U. class	B. Class	L. Class	PG	Grag.	H.S.	Non-M.
A.	Proper Agri. Services											
I	Marginal Farmers	11	2	7	2	2	7	2	0	2	4	5
II	Small Farmers	01	0	1	0	0	1	0	0	0	0	1
III	Medium & Large Farmers	02	1	1	0	1	1	0	1	0	0	1
	Sub Total Proper Agri. Services	14	3	9	2	3	9	2	1	2	4	7
B.	Allied Agri. Services											
I	Marginal Farmers	02	0	2	0	0	2	0	1	0	1	0
II	Small Farmers	01	0	1	0	0	1	0	0	0	0	1
III	Medium & Large Farmers	01	0	1	0	0	1	0	0	0	0	1
	Sub Total Allied Agri. Services	04	0	4	0	0	4	0	1	0	1	2
C.	Both Agri. + Dairy Services											
I	Marginal Farmers	12	1	10	1	1	10	1	0	2	4	6
II	Small Farmers	07	4	3	0	4	3	0	0	3	1	3
III	Medium & Large Farmers	13	2	11	0	2	11	0	0	3	6	4
	Sub Total Both Agri.+ Dairy Services	32	7	24	1	7	24	1	0	8	11	13
	G. Total Non-Beneficiaries	50	10	37	3	10	37	3	2	10	16	22

As regards the educational status, it was found that the maximum i.e. 22 were non-matric sample non-beneficiary farmers, 16 farmers were higher secondary, 10 were graduates and only two sample farmers were post graduates on an overall average. While among the different categories, the maximum educated farmers were in the category of both agri.+ dairy services where in 8 graduates, 11 higher secondary and 13 non-matrices were there in the area under study. Thus, the category of both agri.+ dairy services had the educated farmers in majority in the area under study. The related data are contained in Table V-25.

V. 16.1. Details of Crops Grown in Kharif Season by the Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of crops grown in kharif season by the sample non-beneficiary farmers of ACABC scheme area of U.P. analysed in table V-26 indicates that on an overall average the area under total kharif crops was estimated as 1.70 ha. per farm and the total was irrigated. The maximum of the area under kharif crops i.e. 1.03 ha. was under cereal crops against the minimum i.e. only 0.03 ha. per farm under pulse crops. While the area under other kharif crops including horticultural crops was estimated as 0.63 ha. per farm in the area under study.

Thus, during kharif season the maximum of the cropped area was under cereals and under other crops. The area under pulses was quite negligible in the area under study. The category-wise distribution shows that the maximum area of the kharif crops i.e. 1.19 ha. out of the total 1.99 ha. was covered under kharif cereals in the category of both agri.+ dairy services against the minimum i.e. 0.05 ha. per farm under pulses. While in the category of allied agri. services the maximum kharif area was covered under other crops including horticultural crops and under pulses the area was nil in the category of proper agri. services the maximum of the kharif coverage i.e. 0.86 was under cereals against the minimum i.e. 0.33 ha under other crops including horticultural crops. While the area under pulses was nil in this category too. Thus, the coverage under kharif season was found to be better on the farms under both agri. + dairy services in comparison of the farms under proper agri. services as well as allied agri. services. The related data are given in Table V.26.

Table-V-26
Category-Wise Details of Crops Grown in Kharif Season by the Sample Non-Beneficiary Farmers of
ACABC Scheme Area of U.P.

(Area in Hect./ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Cereals Area		Pulses Area		Others including Horticulture Crops Area		Total Kharif Crops Area	
			Irri.	Total	Irri.	Total	Irri.	Total	Irri.	Total
A.	Proper Agri. Services									
I	Marginal Farmers	11	0.55	0.55	0.00	0.00	0.05	0.05	0.59	0.59
II	Small Farmers	01	2.00	2.00	0.00	0.00	0.00	0.00	2.00	2.00
III	Medium & Large Farmers	02	2.00	2.00	0.00	0.00	2.10	2.10	1.05	4.05
	Sub Total Proper Agri. Services	14	0.86	0.86	0.00	0.00	0.33	0.33	1.19	1.19
B.	Allied Agri. Services									
I	Marginal Farmers	02	0.32	0.32	0.00	0.00	0.12	0.12	0.45	0.45
II	Small Farmers	01	0.50	0.50	0.00	0.00	0.75	0.75	1.25	1.25
III	Medium & Large Farmers	01	0.50	0.50	0.00	0.00	2.00	2.00	2.50	2.50
	Sub Total Allied Agri. Services	04	0.41	0.41	0.00	0.00	0.75	0.75	1.16	1.16
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	12	0.68	0.68	0.01	0.01	0.07	0.07	0.76	0.76
II	Small Farmers	07	1.31	1.31	0.03	0.03	0.09	0.09	1.44	1.44
III	Medium & Large Farmers	13	1.59	1.59	0.10	0.10	1.73	1.73	3.41	3.41
	Sub Total Both Agri.+ Dairy Services	32	1.19	1.19	0.05	0.05	0.74	0.74	1.99	1.99
	G. Total Non-Beneficiaries	50	1.03	1.03	0.03	0.03	0.63	0.63	1.70	1.70

V.16.2. Details of Crops Grown in Rabi Season by the Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of crops grown in rabi season by the sample non-beneficiary farmers of ACABC scheme area of U.P. worked-out in Table V.27 shows that in rabi season too the coverage under crops was 1.70 ha. of which the maximum i.e. 1.04 ha. was under rabi cereals against the minimum i.e. 0.02 ha. under pulses. While the coverage under other crops including horticultural crops was 0.63 ha. per farm. Thus, during rabi season too the maximum coverage was under the rabi cereals.

The category-wise distribution of coverage under rabi crops during rabi season shows that the coverage was better on the farms under both agri.+ dairy services as compared to that on the farm under the category of proper agri. services as well as allied agri. services in the area under study. No. pulses were grown on the farms under the category of proper agri. services as well as allied agri. services in the area under study. Among the non-beneficiary farmers on an average

the medium and large farmers had grown cereals and other crops in large areas than the farmers of marginal and small farmers who had grown only cereals in large areas on their farms in the area under study.

Table-V-27
Category-Wise Details of Crops Grown in Rabi Season by the Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

(Area in Hect./ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Cereals Area		Pulses Area		Others including Horticulture Crops Area		Total Rabi Crops Area	
			Irri.	Total	Irri.	Total	Irri.	Total	Irri.	Total
A.	Proper Agri. Services									
I	Marginal Farmers	11	0.54	0.54	0	0	0.04	0.04	0.59	0.59
II	Small Farmers	01	2.00	2.00	0	0	0.00	0.00	2.00	2.00
III	Medium & Large Farmers	02	2.50	2.50	0	0	1.55	1.55	4.05	4.05
	Sub Total Proper Agri. Services	14	0.93	0.93	0	0	0.26	0.26	1.19	1.19
B.	Allied Agri. Services									
I	Marginal Farmers	02	0.32	0.32	0	0	0.12	0.12	0.45	0.45
II	Small Farmers	01	1.00	1.00	0	0	0.25	0.25	1.25	1.25
III	Medium & Large Farmers	01	0.50	0.50	0	0	2.00	2.00	2.50	2.50
	Sub Total Allied Agri. Services	04	0.54	0.54	0	0	0.62	0.62	1.16	1.16
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	12	0.69	0.69	0	0	0.07	0.07	0.76	0.76
II	Small Farmers	07	1.31	1.31	0	0	0.13	0.13	1.44	1.44
III	Medium & Large Farmers	13	1.51	1.51	0.10	0.10	1.81	1.81	3.41	3.41
	Sub Total Both Agri.+ Dairy Services	32	1.16	1.16	0.04	0.04	0.79	0.79	1.99	1.99
	G. Total Non-Beneficiaries	50	1.04	1.04	0.02	0.02	0.63	0.63	1.70	1.70

V.16.3.Details of Crops Grown in Zaid Season by the Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of crops grown in zaid season by the sample non-beneficiary farmers of ACABC scheme area of U.P. analysed in table V-28 shows that on an overall average it was found that the total area under zaid crops was estimated as 0.51 ha. per farm and the total was irrigated of which the maximum i.e. 0.50 ha. was covered under other zaid crops including horticultural crops in the area under study. The area under pulses was negligible and was grown by only a few marginal farmers of the category of proper agri. services. Thus, in zaid season no cereal crop was grown at all on any farms in any category of sample farmers. Pulses too were grown on a negligible area The category-wise distribution of zaid crops area shows that the coverage under zaid crops too was comparatively higher on the farms under the category of both

agri.+ dairy services as compared to that on the farms under the category of proper agri. services and allied agri. services in the area under study. The related data are given in table V-28.

Table-V-28

Category-Wise Details of Crops Grown in Zaid Season by the Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

(Area in Hect./ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Cereals Area		Pulses Area		Others including Horticulture Crops Area		Total Zaid Crops Area	
			Irri.	Total	Irri.	Total	Irri.	Total	Irri.	Total
A.	Proper Agri. Services									
I	Marginal Farmers	11	0	0	0.02	0.02	0.06	0.06	0.09	0.09
II	Small Farmers	01	0	0	0.00	0.00	0.00	0.00	0.00	0.00
III	Medium & Large Farmers	02	0	0	0.00	0.00	0.30	0.30	0.30	0.30
	Sub Total Proper Agri. Services	14	0	0	0.02	0.02	0.09	0.09	0.11	0.11
B.	Allied Agri. Services									
I	Marginal Farmers	02	0	0	0.00	0.00	0.02	0.02	0.02	0.02
II	Small Farmers	01	0	0	0.00	0.00	0.00	0.00	0.00	0.00
III	Medium & Large Farmers	01	0	0	0.00	0.00	0.00	0.00	0.00	0.00
	Sub Total Allied Agri. Services	04	0	0	0.00	0.00	0.01	0.01	0.01	0.01
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	12	0	0	0.00	0.00	0.39	0.39	0.39	0.39
II	Small Farmers	07	0	0	0.00	0.00	0.59	0.59	0.59	0.59
III	Medium & Large Farmers	13	0	0	0.00	0.00	1.16	1.16	0.16	0.16
	Sub Total Both Agri.+ Dairy Services	32	0	0	0.00	0.00	0.75	0.75	0.75	0.75
	G. Total Non-Beneficiaries	50	0	0	0.01	0.01	0.50	0.50	0.51	0.51

V.17. Details of Seasonal gross Irrigated and Cropped Area on the Farms of Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of seasonal gross irrigated and cropped area on the farms of sample non-beneficiary farmers of ACABC scheme Area of U.P. analysed in Table V-29 shows that on an overall average the gross cropped area per farm was estimated as 3.91 ha. of which the maximum i.e. 1.70 ha was covered during kharif season and thereafter the total 1.70 ha. was cropped during rabi season too. While the coverage during zaid season was only 0.51 ha. per farm in the area

under study. On the other hand the distribution of gross irrigated area as well as season wise irrigated area shows that the total cropped area was found to be irrigated on an overall. The category-wise analysis on the cropped area indicates that the average gross cropped area was maximum i.e. 4.73 ha. per farm in the category of both agri.+ dairy services against the minimum i.e. 2.34 ha. per farm in the category of allied agri. services. While in the category of proper agri. services it was estimated as 2.48 ha per farm in the area under study. Thus, it is obviously clear that farms under the category of both agri.+ dairy services were cropped more intensively as compared to the farms and the category of proper agri. services as well as allied agri. services in the area under the study. In all the categories the farm were totally irrigated but the intensity of cropping was higher on the farms under the category of both agri.+ dairy services which confirms that effects of the implementation of ACABC scheme were more as compared to that on the farms of other two categories in the area under study. The related data are given in Table V-29.

Table-V-29
Category-Wise Details of Seasonal Total Irrigated and Cropped Area on the Farms of Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.
(Area in Hect./ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Total Irrigated Area			Gross Irrigated Area	Total Cropped Area			Gross Cropped Area
			Kharif	Rabi	Zaid		Kharif	Rabi	Zaid	
A.	Proper Agri. Services									
I	Marginal Farmers	11	0.59	0.59	0.09	1.27	0.59	0.59	0.09	1.27
II	Small Farmers	01	2.00	2.00	0.00	4.00	2.00	2.00	0.00	4.00
III	Medium & Large Farmers	02	4.05	4.05	0.30	8.40	4.05	4.05	0.30	8.40
	Sub Total Proper Agri. Services	14	1.19	1.19	0.11	2.48	1.19	1.19	0.11	2.48
B.	Allied Agri. Services									
I	Marginal Farmers	02	0.45	0.45	0.02	0.92	0.45	0.45	0.02	0.92
II	Small Farmers	01	1.25	1.25	0.00	2.50	1.25	1.25	0.00	2.50
III	Medium & Large Farmers	01	2.50	2.50	0.00	5.00	2.50	2.50	0.00	5.00
	Sub Total Allied Agri. Services	04	1.16	1.16	0.01	2.34	1.16	1.16	0.01	2.34
C.	Both Agri. + Dairy Services									
I	Marginal Farmers	12	0.76	0.76	0.39	1.92	0.76	0.76	0.39	1.92
II	Small Farmers	07	1.44	1.44	0.59	3.48	1.44	1.44	0.59	3.48
III	Medium & Large Farmers	13	3.41	3.41	1.16	7.99	3.41	3.41	1.16	7.99
	Sub Total Both Agri.+ Dairy Services	32	1.99	1.99	0.75	4.73	1.99	1.99	0.75	4.73
	G. Total Non-Beneficiaries	50	1.70	1.70	0.51	3.91	1.70	1.70	0.51	3.91

V.18.1. Details of Inputs and Outputs of Kharif Crops on the Farms of Non-Beneficiaries of ACABC Scheme Area of U.P.

Category-wise details of inputs and outputs of kharif crops on the farms of sample non-beneficiary farmers of ACABC scheme Area of U.P. analyzed in Table V-30 indicates that on an overall average the gross outputs from kharif crops was accounted as Rs. 67,702 per farm. While the total inputs per farm was estimated as Rs. 45,241 of which the maximum i.e. Rs. 31,878 was an account of other inputs and Rs. 13,363 was on account of own inputs. Among the crops, the maximum outputs i.e. Rs. 47852 were received from kharif cereals against the minimum outputs i.e. Rs. 6,017 from pulses. While the outputs from other kharif crops were estimated as Rs. 13,863 on an average. Thus, the maximum outputs were received from kharif cereals. Accordingly the maximum inputs i.e. Rs 33,641 per farm was incurred on kharif cereals only. On the other hand the amount of other inputs incurred on all the kharif crops was found higher than the own inputs incurred on all the crops.

The category-wise analysis shows that outputs from kharif crops was higher i.e. Rs. 70,305 per farm on the farms under both agri+ dairy services against the lowest i.e. Rs 49,194 per farm under allied agri. services. While under proper agri. services it was estimated as Rs 65,134 per farm. Thus, in case of non- beneficiary farmers too, the farms under both agri. + dairy services were comparatively more productive in the area under study. The related data are given in Table V-30.

V.18.2. Details of Inputs and Outputs of Rabi Crops on the Farms of Non-Beneficiaries of ACABC Scheme Area of U.P.

Categories –wise details of inputs and outputs of Rabi crops on the farms of non-beneficiary farmers of ACABC scheme area of U.P. analyzed in Table V-31 indicates that on an overall average the gross outputs received from the rabi crops was accounted as Rs 1,41,282 per farm. While the total inputs on rabi crops was incurred as Rs 73,776 per farm of which the maximum i.e. Rs 51,788 was incurred on other inputs and Rs 21,988 on own inputs per farm. Thus, rabi crops on the farms of non beneficiaries too were significantly productive and profitable in the area under study. Further among the rabi crops the output per farm was estimated as maximum i.e. Rs 86,462 from other rabi crops against the minimum as Rs 11,750 from rabi pulses. The outputs from rabi cereals was estimated as Rs 43,070 per farm on the farms of non beneficiaries

in the ACABC scheme area of U.P. Thus, on the farms of non-beneficiaries other rabi crops were found to be comparatively more productive than other crops. The category-wise distribution of outputs from rabi crops shows that the maximum output i.e. Rs 1,44,818 per farm was accounted on the farms under the category of both agri.+ dairy services against the minimum i.e. Rs 43,462 per farm under allied agri services. While on the farms under proper agri. services it was accounted as Rs 63,494 per farm. Thus, farms under both agri.+ dairy services were comparatively more productive than the farms under other categories.

Accordingly the inputs incurred on rabi crops were highest on the farms under both agri.+ dairy services against the lowest the lowest on the farms under allied agri. services and other rabi crops were more productive on the farms of non-beneficiaries. The related data are given in Table V-31.

V.18.3.Details of Inputs and Outputs of Zaid Crops on the Farms of Non-Beneficiaries of ACABC Scheme Area of U.P.

The category-wise details of inputs and outputs of zaid crops on the farms of non-beneficiaries of ACABC scheme area of U.P. analyzed in Table V-32 shows that no cereal crop was grown on any of the farms of any category. Pulses were grown on only a few farms under proper agri. services only other zaid crops were grown on the farms under the category of both agri.+ dairy services and on only a few farms under proper agri. services and allied agri. services. As a result, the total outputs per farm on an overall were estimated as Rs 15,118 of which the maximum i.e. Rs 10,618 was received from other crops and only Rs 4,500 from pulses. Thus, only other crops were grown on the farms of non- beneficiaries and that too on the farms under the category of both agri.+ dairy services. The inputs incurred were estimated as Rs 10,788 per farm on an overall. The output per farm was highest i.e. Rs 33,000 in the category of allied agri. services against the lowest i.e. Rs 13,100 in the category of proper agri. services.

V.19. Details of Inputs, Outputs and Net Incomes from All Crops on the Farms of the Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of inputs, outputs and net incomes from all crops on the farms of the sample non-beneficiary farmers of ACABC scheme area of U.P. worked out in Table V.33 indicates that on an overall the gross outputs from all crops was received as Rs 2,24,102 per farm. While the total inputs incurred per farm was estimated as Rs 1,29,805 of which the maximum i.e. Rs 90,577 was incurred on other inputs and Rs 39,228 on own inputs. The highest amount of other inputs indicates that on an aggregate level, the farms of non-beneficiaries were productive significantly.

Table-V-30

Category-Wise Details of Inputs and Outputs of Kharif Crops on the Farms of Sample Non-Beneficiary Farmers of the ACABC Scheme Area in U.P.

(Inputs in Rs, Outputs in Rs/ Non-Beneficiary)

Sl.No	Category of Non-Beneficiary Farmers	No. of Samples	Cereals			Outputs (Rs)	Pulses			Outputs (Rs)	Others			Total Kharif Crops				
			Inputs (Rs)				Inputs (Rs)				Inputs (Rs)			Inputs (Rs)				
			Own	Others	Total	Own	Others	Total	Own	Others	Total	Own	Others	Total	Own	Others	Total	Outputs (Rs)
A.	Proper Agri. Services																	
I	Marginal Farmers	11	5489	12550	18039	26216	0	0	0	0	2000	1400	3400	9000	7489	13950	21439	35216
II	Small Farmers	1	22000	24000	46000	59000	0	0	0	0	0	0	0	0	22000	24000	46000	59000
III	Medium & Large Farmers	2	20000	46000	66000	91500	0	0	0	0	11000	17000	28000	45500	31000	63000	94000	137000
	Sub Total Proper Agri. Services	14	8741	18146	26887	37884	0	0	0	0	6500	9200	15700	27250	15241	27346	42587	65134
B.	Allied Agri. Services																	
I	Marginal Farmers	2	4670	6200	10870	16172	0	0	0	0	1200	2500	3700	6200	5870	8700	14570	22372
II	Small Farmers	1	8000	12000	20000	25000	0	0	0	0	5000	5000	10000	28000	13000	17000	30000	53000
III	Medium & Large Farmers	1	8000	9000	17000	24500	0	0	0	0	15000	25000	40000	52000	23000	34000	57000	76500
	Sub Total Allied Agri. Services	4	6335	8350	14685	20461	0	0	0	0	7067	10833	17900	28733	13402	19183	32585	49194
C.	Both Agri. + Dairy Services				0													
I	Marginal Farmers	12	4604	17442	22046	32133	600	1000	1600	5600	1500	1767	3267	5033	6704	20209	26913	42766
II	Small Farmers	7	8390	33829	42219	62729	1150	2050	3200	5100	883	1633	2516	3883	10423	37512	47935	71712
III	Medium & Large Farmers	13	14015	38815	52830	73400	1525	2425	3950	6350	2174	3865	6039	10653	17714	45105	62819	90403
	Sub Total Both Agri.+ Dairy Services	32	9256	29709	38965	55591	1308	2125	3433	6017	1864	3182	5046	8697	12428	35016	47444	70305
	G. Total Non-Beneficiaries	50	8878	24763	33641	47822	1308	2125	3433	6017	3177	4990	8167	13863	13363	31878	45241	67702

Table-V-31
Category-Wise Details of Inputs and Outputs of Rabi Crops on the Farms of Sample Non-Beneficiary Farmers of the ACABC
Scheme Area in U.P.

(Inputs in Rs, Outputs in Rs/ Non-Beneficiary)

Sl.No	Category of Non-Beneficiary Farmers	No. of Samples	Cereals				Pulses				Others				Total Rabi Crops			
			Inputs (Rs)			Output (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)
			Own	Others	Total		Own	Others	Total		Own	Others	Total		Own	Others	Total	
A.	Proper Agri. Services																	
I	Marginal Farmers	11	5006	10250	15256	19175	0	0	0	0	3500	4000	7500	13500	8506	14250	22756	32675
II	Small Farmers	1	20000	24000	44000	58000	0	0	0	0	0	0	0	0	20000	24000	44000	58000
III	Medium & Large Farmers	2	22500	40000	62500	100000	0	0	0	0	12000	15500	27500	46500	34500	55500	90000	146500
	Sub Total Proper Agri. Services	14	8576	15482	24058	33494	0	0	0	0	7750	9750	17500	30000	16326	25232	41558	63494
B.	Allied Agri. Services																	
I	Marginal Farmers	2	4640	5200	9840	14590	0	0	0	0	1200	2500	3700	5000	5840	7700	13540	19590
II	Small Farmers	1	10000	12000	22000	30000	0	0	0	0	4000	3000	7000	8000	14000	15000	29000	38000
III	Medium & Large Farmers	1	7000	7000	14000	24000	0	0	0	0	15000	25000	40000	55000	22000	32000	54000	79000
	Sub Total Allied Agri. Services	4	6570	7350	13920	20795	0	0	0	0	6733	10167	16900	22667	13303	17517	30820	43462
C.	Both Agri. + Dairy Services																	
I	Marginal Farmers	12	4117	15771	19888	28854	0	0	0	0	1750	750	2500	4750	5867	16521	22388	33604
II	Small Farmers	7	7460	35574	43034	59124	0	0	0	0	1043	2660	3703	4814	8503	38234	46737	63938
III	Medium & Large Farmers	13	9719	35550	45269	64715	1550	4500	6050	11750	22292	44102	66394	125147	33561	84152	117713	201612
	Sub Total Both Agri.+ Dairy Services	32	7124	28138	35262	50044	1550	4500	6050	11750	14925	29407	44332	83024	23599	62045	85644	144818
	G. Total Non-Beneficiaries	50	7486	22931	30417	43070	1550	4500	6050	11750	12952	24357	37309	86462	21988	51788	73776	141282

Table-V-32

Category-Wise Details of Inputs and Outputs of Zaid Crops on the Farms of Sample Non-Beneficiary Farmers of the ACABC Scheme Area in U.P.

(Inputs in Rs, Outputs in Rs/ Non-Beneficiary)

Sl.No	Category of Non-Beneficiary Farmers	No. of Samples	Cereals				Pulses				Others				Total Zaid Crops			
			Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)	Inputs (Rs)			Outputs (Rs)
			Own	Others	Total		Own	Others	Total		Own	Others	Total		Own	Others	Total	
A.	Proper Agri. Services																	
I	Marginal Farmers	11	0	0	0	0	2000	800	2800	4500	987	1967	2954	4500	2987	2767	5754	9000
II	Small Farmers	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
III	Medium & Large Farmers	2	0	0	0	0	0	0	0	0	4750	4750	9500	14750	4750	4750	9500	14750
	Sub Total Proper Agri. Services	14	0	0	0	0	2000	800	2800	4500	2492	3080	5572	8600	4492	3880	8372	13100
B.	Allied Agri. Services														0	0	0	0
I	Marginal Farmers	2	0	0	0	0	0	0	0	0	700	1200	1900	3300	700	1200	1900	3300
II	Small Farmers	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
III	Medium & Large Farmers	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sub Total Allied Agri. Services	4	0	0	0	0	0	0	0	0	700	1200	1900	3300	700	1200	1900	3300
C.	Both Agri. + Dairy Services														0	0	0	0
I	Marginal Farmers	12	0	0	0	0	0	0	0	0	1018	3864	4882	6236	1018	3864	4882	6236
II	Small Farmers	7	0	0	0	0	0	0	0	0	1629	4329	5958	8236	1629	4329	5958	8236
III	Medium & Large Farmers	13	0	0	0	0	0	0	0	0	2592	10515	13107	16946	2592	10515	13107	16946
	Sub Total Both Agri.+ Dairy Services	32	0	0	0	0	0	0	0	0	1816	6758	8574	11179	1816	6758	8574	11179
	G. Total Non-Beneficiaries	50	0	0	0	0	2000	800	2800	4500	1877	6111	7988	10618	3877	6911	10788	15118

Table-V-33
Category-Wise Details of Inputs, Outputs and Net Incomes from All Crops on the Farms of the
Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

(Inputs in Rs. &Outputs in Rs/ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Gross Inputs (Rs)			Gross Outputs (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	11	18,982	30,967	49,949	76,891	26,942
II	Small Farmers	01	42,000	48,000	90,000	1,17,000	27,000
III	Medium & Large Farmers	02	70,250	1,23,250	1,93,500	2,98,250	1,04,750
	Sub Total Proper Agri. Services	14	36,059	56,458	92,517	1,44,728	52,211
B.	Allied Agri. Services						
I	Marginal Farmers	02	12,410	17,600	30,010	45,862	15,852
II	Small Farmers	01	27,000	32,000	59,000	91,000	32,000
III	Medium & Large Farmers	01	45,000	66,000	1,11,000	1,55,500	44,500
	Sub Total Allied Agri. Services	04	27,405	37,900	65,305	95,956	30,651
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	12	13,589	40,594	54,183	82,606	28,423
II	Small Farmers	07	20,555	80,075	1,00,630	1,43,886	43,256
III	Medium & Large Farmers	13	53,867	1,39,772	1,93,639	3,08,961	1,15,322
	Sub Total Both Agri.+ Dairy Services	32	37,843	1,03,819	1,41,662	2,26,302	84,640
	G. Total Non-Beneficiaries	50	39,228	90,577	1,29,805	2,24,102	94,297

This fact is confirmed by the amount of net income of Rs 94,297 per farm on an average. The category-wise distribution of gross outputs as well as net incomes shows that the gross outputs was highest i.e. Rs 2,26,302 per farm under the category by both agri+ dairy services against the lowest i.e. Rs 95,956 under the category of allied agri. services. While under Rs category of proper agri. services it was estimated as Rs 1,44,278 per farm. Thus, the farms under the categories of both agri.+ dairy services as well as proper agri. services were comparatively more productive. Accordingly the net income per farm was highest on the farms under both agri+ dairy services adopted by non-beneficiaries.

V. 20.1 Details of Inputs, Outputs and Net Incomes from Milch Animals reared by Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of inputs, outputs and net incomes from Milch animals reared by sample non-beneficiary farmers of ACABC scheme area of U.P. worked out in Table V-34 indicates that on an overall average the total outputs received from milch animals was accounted as Rs 76,573

per farm. While the total inputs incurred were estimated as Rs 59,122 per farm of which the maximum i.e. Rs 45,451 was on account of other inputs and Rs 13,671 on account of own inputs.

Table-V-34

Category-Wise Details of Inputs, Outputs and Net Incomes from Milch Animals Reared by Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

(Inputs in Rs. &Outputs in Rs/ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own Sources	Others Sources	Total (Rs)		
A.	Proper Agri. Services						
I	Marginal Farmers	11	11,300	37,700	49,000	55,300	6,300
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	02	18,500	23,000	41,500	54,000	12,500
	Sub Total Proper Agri. Services	14	13,357	32,071	45,428	54,929	9,501
B.	Allied Agri. Services						
I	Marginal Farmers	02	45,000	89,000	1,34,000	1,56,000	22,000
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	01	30,000	78,000	1,08,000	1,56,000	48,000
	Sub Total Allied Agri. Services	04	37,500	83,500	1,21,000	1,56,000	35,000
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	12	16,333	61,333	77,666	1,01,792	24,126
II	Small Farmers	07	21,086	44,286	65,372	79,743	14,371
III	Medium & Large Farmers	13	30,154	1,13,231	1,43,385	1,87,923	44,538
	Sub Total Both Agri.+ Dairy Services	32	22,988	78,688	1,01,676	1,31,959	30,283
	G. Total Non-Beneficiaries	50	13,671	45,451	59,122	76,573	17,451

Thus, the net income per farm was estimated as Rs 17,451 on an overall average which very well confirms that milch animals reared by non-beneficiary farmers were assured sources of income on their farms. The category-wise analysis indicates that the maximum outputs i.e. Rs 1,56,000 per farm was accounted under the category of allied agri. services against the minimum i.e. Rs 54,929 per farm under the proper agri. services. While under the category of both agri.+ dairy services, it was estimated as Rs 1,31,959 per farm. Thus, the outputs per farm received from milch animals were highest under the category of allied agri. services as compared to that under the categories of proper agri. services and both agri. dairy services. Accordingly the net income per farm was highest on the farms under the category of allied agri. services in comparison of the farms under other categories of farmers in the area under study.

V.20.2. Details of Inputs, Outputs and Net Income from Draught Animals Reared by Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise Details of inputs, outputs and net income from draught animals reared by sample non-beneficiary farmers of ACABC scheme area of U.P. worked out in Table-V-35 indicates that on an overall average the outputs received from draught animals was estimated as Rs 1,783 per farm only. While the total inputs incurred on draught animals was estimated as Rs 1,500 per farm which was own inputs only.

Table-V-35
Category-Wise Details of Inputs and Outputs from Draught Animals Reared by Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

(Inputs in Rs. & Outputs in Rs/ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	11	1,133	0	1,133	1,367	234
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	02	2,750	0	2,750	3,250	500
	Sub Total Proper Agri. Services	14	1,271	0	1,271	1,514	243
B.	Allied Agri. Services				0		0
I	Marginal Farmers	02	8,000	0	8,000	8,500	500
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	01	8,000	0	8,000	8,500	500
	Sub Total Allied Agri. Services	04	8,000	0	8,000	8,750	750
C.	Both Agri. + Dairy Services				0		0
I	Marginal Farmers	12	1,533	0	1,533	1,733	200
II	Small Farmers	07	1,950	0	1,950	2,183	233
III	Medium & Large Farmers	13	2,509	0	2,509	3,118	609
	Sub Total Both Agri.+ Dairy Services	32	2,042	0	2,042	2,423	381
	G. Total Non-Beneficiaries	50	1,500	0	1,500	1783	283

Thus, there was a nominal net income of Rs 283 per farm only which clearly indicates that rearing draught animals on the farms of non-beneficiaries farmers was not economic and therefore, they were rearing draught animals in distress. Among the different categories of non-beneficiary farmers, it was found that in the category of allied agri. services, the output per farm was estimated to be highest Rs 8,750 wherein the total inputs was estimated as Rs 8,00 per farm. Therefore, there was a net income of Rs 780 per farm which very well confirms that rearing draught animals was uneconomic on the farms.

V.20.3. Details of Inputs, Outputs and Net Income from other Animals Reared by Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of inputs, output and net incomes from other animals reared by sample non-beneficiary farmers of ACABC scheme area of U.P. analyzed in Table-V.36 indicates that on an overall average the total outputs per farm from other animal reared by non-beneficiary farmer was estimated as Rs 3,400. While the total inputs per farm was incurred as Rs 2,527.

Thus, there was a net income of Rs 873 per farm only which was too scanty. The category-wise analysis shows that the output per farm was highest under the category of allied agri. services wherein the inputs per farm were also highest and almost equal to the outputs. Hence, the net income per farm was slightly higher i.e. Rs 792 per farm under the category of proper agri. services against Rs. 500 per farm under the allied agri. services and only Rs. 191 per farm under both agri.+ dairy services which was too scanty. The data are given in Table V-36.

Table-V-36
Category-Wise Details of Inputs and Outputs from other Animals Reared by Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.
(Inputs in Rs. &Outputs in Rs/ Non-Beneficiary)

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	11	1,700	0	1,700	1,850	150
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	02	4,500	0	4,500	5,000	500
	Sub Total Proper Agri. Services	14	2,633	0	2,633	3,425	792
B.	Allied Agri. Services				0		0
I	Marginal Farmers	02	0	0	0	0	0
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	01	11,000	0	11,000	11,500	500
	Sub Total Allied Agri. Services	04	11,000	0	11,000	11,500	500
C.	Both Agri. + Dairy Services				0		0
I	Marginal Farmers	12	2,000	0	2,000	2,233	233
II	Small Farmers	07	1,600	0	1,600	1,750	150
III	Medium & Large Farmers	13	3,167	0	3,167	3,350	183
	Sub Total Both Agri.+ Dairy Services	32	2,564	0	2,564	2,755	191
	G. Total Non-Beneficiary	50	2,527	0	2,527	3,400	873

V.20.4. Details of Inputs, Outputs and Net Incomes from total Animals Reared by Non-Beneficiary Farmers of ACABC Scheme Area of U.P.

Category-wise details of inputs, outputs and net incomes from total animals reared by sample non-beneficiary farmers of ACABC scheme area of U.P. worked -out in Table V-37 indicates that on an overall average the total outputs received per farm was accounted as Rs 81,756. While the total inputs incurred were accounted as Rs. 62, 880 of which the maximum i.e. Rs 45,451 was on account of offer inputs against Rs 17,429 per farm on account of own inputs. Thus, the net income from total animals was estimated as Rs 18,876 per farm which was a considerable income in addition to the incomes from crop enterprises on the farms of non-beneficiaries in the area of study. The category-wise analysis indicates that the maximum outputs i.e. Rs 1,76,250 per farm was estimated under the category of allied agri. services against the minimum i.e. Rs. 59,868 per farm under proper agri. services. While under both agri.+ dairy services it was estimated as Rs. 1,37,137 per farm. Thus, the outputs per farm were highest on the farms under allied agri. services. Accordingly the net income per farm was also highest on the farms under allied agri. services which conforms that on the farms of non-beneficiaries, the incomes from rearing animals was considerable an average. The data are given in Table 37.

Table-V-37

**Category-Wise Details of Inputs, Outputs and Net Incomes from total Animals Reared by Sample Non-Beneficiary Farmers of ACABC Scheme Area of U.P.
(Inputs in Rs. & Outputs in Rs/ Non-Beneficiary)**

Sl. No.	Category of Sample Non-Beneficiary Farmers	No. of Samples	Inputs Incurred (Rs)			Outputs Received (Rs)	Net Incomes (Rs)
			Own	Others	Total		
A.	Proper Agri. Services						
I	Marginal Farmers	11	14,133	37,700	51,833	58,517	6,684
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	02	25,750	23,000	48,750	62,250	13,500
	Sub Total Proper Agri. Services	14	17,261	32,071	49,332	59,868	10,536
B.	Allied Agri. Services				0		0
I	Marginal Farmers	02	53,000	89,000	1,42,000	1,64,500	22,500
II	Small Farmers	01	0	0	0	0	0
III	Medium & Large Farmers	01	49,000	78,000	1,27,000	1,76,000	49,000
	Sub Total Allied Agri. Services	04	56,500	83,500	1,40,000	1,76,250	36,250
C.	Both Agri. + Dairy Services						0
I	Marginal Farmers	12	19,866	61,333	81,199	1,05,758	24,559
II	Small Farmers	07	24,636	44,286	68,922	83,676	14,754
III	Medium & Large Farmers	13	35,830	1,13,231	1,49,061	1,94,391	45,330
	Sub Total Both Agri.+ Dairy Services	32	27,470	78,688	1,06,158	1,37,137	30,979
	G. Total Non-Beneficiaries	50	17,429	45,451	62,880	81,756	18,876

V.21. Details of Answers against the Questions from Non- Beneficiary Farmers of the ACABC Scheme Area in U.P.

Category-wise details of answers against the questions from non- beneficiary farmers of the same area of ACABC scheme in U.P. worked-out in Table V-38 shows that on an overall the maximum i.e. 37 out of 50 non-beneficiaries had told that they had not heard about Agri, clinic. Only 13 non-beneficiary farmers had heard about agri-clinic. Thus, it is obviously clear that majority of non-beneficiary farmers of the ACABC scheme area of U.P. were not at all aware about the agri. clinic i.e. till the survey period of this study.

Table V-38
Category-wise Details of Answers against the Questions from Non- Beneficiary Farmers of the Same Area of ACABC Scheme in U.P.

(In numbers)

Sl.No	Category of Non-Beneficiary Farmers	No. of Samples	Heard about Agri-Clinic		If yes reasons for not Availing Services			Heard about the Agri-Business Centres		If yes reasons for not Purchasing Inputs		
			Yes	No	(1)	(2)	(3)	Yes	No	(1)	(2)	(3)
A.	Proper Agri. Services											
I	Marginal Farmers	11	2	9	2	0	0	2	9	2	0	0
II	Small Farmers	01	0	1	0	0	0	0	1	0	0	0
III	Medium & Large Farmers	02	1	1	0	1	0	1	1	0	1	0
	Sub Total Proper Agri. Services	14	3	11	2*	1**	0	3	11	2*	1**	0
B.	Allied Agri. Services											
I	Marginal Farmers	02	1	1	1	0	0	1	1	1	0	0
II	Small Farmers	01	0	1	0	0	0	0	1	0	0	0
III	Medium & Large Farmers	01	0	1	0	0	0	0	1	0	0	0
	Sub Total Allied Agri. Services	04	1	3	1	0	0	1	3	1	0	0
C.	Both Agri. + Dairy Services											
I	Marginal Farmers	12	3	9	2	1	0	3	9	2	1	0
II	Small Farmers	07	2	5	1	1	0	2	5	1	1	0
III	Medium & Large Farmers	13	4	9	2	2	0	4	9	2	2	0
	Sub Total Both Agri.+ Dairy Services	32	9	23	5	4	0	9	23	5	4	0
	G. Total Non-Beneficiaries	50	13	37	8	5	0	13	37	8	5	0

- Long Distance from the villages. ** Inputs were costly.

Those who had heard about the agri-clinic had assigned two main reasons for not availing their services such as (1) Long distance of clinic from their villages and (2) Inputs to be most costly where in 8 non-beneficiaries responded for the first reason and 5 responded for the second reason. Similarly, majority of non-beneficiary famers i.e. 37 out of 50 had reported not to hear the names of agri.-business centres to be established in their area and those who had told yes, they had told the same reasons for not availing the services of agri.-business Centres too. Thus, it is clear that ACABC were just started in their areas.

V.22. Details of the Sources of procuring Inputs by the Sample Non-Beneficiary Farmers of the Area of ACABC Scheme in U.P.

Category-wise details of the sources of procuring inputs by the sample non-beneficiary farmers of the Area of ACABC Scheme in U.P. worked-out in Table V-39 shows that on an overall 22 out of 50 non-beneficiary farmers had reported to procure their required inputs from their own sources.

Table V-39
Category-wise Details of the Sources of Procuring Inputs by the Sample Non-Beneficiary Farmers of the Area of ACABC Scheme in U.P.

(In Numbers)						
Sl.No.	Category of Non-Beneficiary Farmers	No. of Samples	Own Sources	On Hire from Shopkeepers	As Subsidy by Govt. Deptt.	Other Sources
A.	Proper Agri. Services					
I	Marginal Farmers	11	05	06	00	00
II	Small Farmers	01	01	00	00	00
III	Medium & Large Farmers	02	02	00	00	00
	Sub Total Proper Agri. Services	14	08	06	00	00
B.	Allied Agri. Services					
I	Marginal Farmers	02	02	00	00	00
II	Small Farmers	01	01	00	00	00
III	Medium & Large Farmers	01	01	00	00	00
	Sub Total Allied Agri. Services	04	04	00	00	00
C.	Both Agri. + Dairy Services					
I	Marginal Farmers	12	05	07	00	00
II	Small Farmers	07	02	05	00	00
III	Medium & Large Farmers	13	03	10	00	00
	Sub Total Both Agri.+ Dairy Services	32	10	22	00	00
	G. Total Non-Beneficiaries	50	32	28	00	00

While the remaining 28 farmers had told to procure their needed inputs on hire from the nearby shopkeepers of their areas. No other sources of procuring inputs were reported by any of the non-beneficiaries. Also not a single non-beneficiary farmer has reported to receive any subsidy on any of the inputs by the government departments of the state or central government. Thus, the non-beneficiary farmers were quite ignorant about the ACABC scheme in their area. Those, who were knowing about the ACABCs, were helpless as the inputs from agri. ventures under ACABCs scheme were costly in comparison of the inputs supplied by the shopkeepers of the nearby areas. The related data are contained in Table V-39.

V.23. Details of Extension Services Received by Non-Beneficiary Farmers of the Same Area of ACABC Scheme in U.P.

Category-wise details of extension services received by non-beneficiary farmers of the same area of ACABC scheme in U.P. worked-out in Table V-40 indicate that out of the total 50 non-beneficiary farmers, the maximum i.e. 43 farmers had reported not to receive any extension services from any of the government or private agencies. While 7 sample non-beneficiary farmers had told to receive the extension services of which the maximum i.e. 6 farmers had reported to receive valuable extension services from the seed store in charges of the state agriculture department and only one farmer had reported to receive extension services from the nearby shopkeeper of agricultural inputs.

Thus, the majority of non-beneficiary farmers had reported not to receive any such extension services from any of the government line department or any private agencies related to agricultural extension services. Among different categories the maximum i.e. 28 were such farmers of the category of both agri.+ dairy services

Table V-40
Category-wise Details of Extension Services Received by Non-Beneficiary Farmers of the Same
Area of ACABC Scheme in U.P.

(In numbers)

Sl.No.	Category of Non-Beneficiary Farmers	No. of Samples	Received any Extension Services		If yes Received from whom		
			Yes	No	(1)	(2)	(3)
A.	Proper Agri. Services						
I	Marginal Farmers	11	03	08	02*	01**	00
II	Small Farmers	01	00	01	00	00	00
III	Medium & Large Farmers	02	00	02	00	00	00
	Sub Total Proper Agri. Services	14	03	11	02	01	00
B.	Allied Agri. Services						
I	Marginal Farmers	02	00	02	00	00	00
II	Small Farmers	01	00	01	00	00	00
III	Medium & Large Farmers	01	00	01	00	00	00
	Sub Total Allied Agri. Services	04	00	04	00	00	00
C.	Both Agri. + Dairy Services						
I	Marginal Farmers	12	02	10	02	00	00
II	Small Farmers	07	00	07	00	00	00
III	Medium & Large Farmers	13	02	11	02	00	00
	Sub Total Both Agri.+ Dairy Services	32	04	28	04	00	00
	G. Total Non-Beneficiaries	50	07	43	06	01	00

- Seed store of Agri. Deptt. ** Nearby shop keepers

V.24. Details about Satisfaction with the Availability of Inputs and Outputs to the Non-Beneficiary Farmers of the Area of ACABC Scheme in U.P.

Category-wise details about satisfaction with the availability of inputs and outputs to the non-beneficiary farmers of the area of ACABC scheme in U.P. worked out in Table V-41 shows that out of 50 sample non-beneficiary farmers the maximum i.e. 37 farmers had reported not to be satisfied with the availability of inputs and they had given two main reasons for their unsatisfaction such as (1) Inputs were very costly and (2) The available seeds, fertilizers and pesticides were adulterated. Thus, only one fourth of the sample non-beneficiaries were satisfied with the inputs. The majority of non-beneficiaries had complained about adulteration in the inputs to be the main reasons of their unsatisfaction for the available inputs in their areas. As regards the satisfaction about outputs, 24 farmers had said yes and 26 sample farmers had said No. Thus, almost fifty percent of the sample non-beneficiaries were satisfied with the outputs of the crops and fifty percent farmers were not satisfied with the outputs of their crops and those

who were unsatisfied, gave the same reasons as given about inputs. The related data are given in Table-41.

Table V-41
Category-wise Details about Satisfaction with the Availability of Inputs and Outputs to the Non-Beneficiary Farmers of the Area of ACABC Scheme in U.P.

(In Numbers)

Sl. No.	Category of Non-Beneficiary Farmers	No. of Samples	Satisfied with Availability of Inputs		If No Give Reasons			Satisfied with Output of Crops		If No Give Reasons		
			Yes	No	(1)	(2)	(3)	Yes	No	(1)	(2)	(3)
A.	Proper Agri. Services											
I	Marginal Farmers	11	3	8	2*	6**	0	3	8	3	5	0
II	Small Farmers	01	0	1	0	1	0	0	1	1	0	0
III	Medium & Large Farmers	02	0	2	1	1	0	0	2	0	2	0
	Sub Total Proper Agri. Services	14	3	11	3	8	0	3	11	4	7	0
B.	Allied Agri. Services											
I	Marginal Farmers	02	1	1	1	0	0	2	0	0	0	0
II	Small Farmers	01	0	1	0	1	0	1	0	0	0	0
III	Medium & Large Farmers	01	0	1	0	1	0	1	0	0	0	0
	Sub Total Allied Agri. Services	04	1	3	1	2	0	4	0	0	0	0
C.	Both Agri. + Dairy Services											
I	Marginal Farmers	12	4	8	2	8	0	8	4	2	2	0
II	Small Farmers	07	2	5	2	3	0	4	3	1	2	0
III	Medium & Large Farmers	13	3	10	4	6	0	5	8	3	5	0
	Sub Total Both Agri.+ Dairy Services	32	9	23	8	15	0	17	15	7	8	0
	G. Total Non-Beneficiaries	50	13	37	12	25	0	24	26	11	15	0

• Inputs were very costly.

** Other available seeds Fertilizers were adulterated.

V.25.1 Category-Wise Comparative Cultivated and Irrigated Area with Irrigation Intensity on the Farms of Sample Beneficiary and Non-Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise comparative cultivated and irrigated area with irrigation intensity on the farms of sample beneficiary and non-beneficiary farmers under ACABC scheme in U.P. analysed in Table V-42 indicates that the net cultivated area on the farms of beneficiaries was estimated as 1.63 ha per farm and on the farms of non-beneficiaries it was estimated as 1.70 ha per farm in the ACABC scheme area of U.P. The total net cultivated area in cases of both types of sample farmers was reported to be irrigated under all the three categories of sample farmers. While, the gross irrigated area on the sample beneficiary farms was estimated as 3.75 ha against 3.91 ha per farm on the sample non- beneficiary farms. The size of farms in case of the beneficiary farmers was comparatively larger in the category of allied agri services. While in case of non-beneficiary farmers it was comparatively larger in the category of both agri.+ dairy services. Thus, the beneficiary farmers under allied agri. services and non-beneficiary farmers under both agri.+ dairy services were comparatively more prosperous in the area under the study. The irrigation intensity on all the farms under all the three categories was estimated as 100 percent.

V.25.2. Comparative Cultivated and Irrigated Area with Irrigation Intensity on the Farms of Sample Beneficiary and Non-Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise comparative cultivated and irrigated area with irrigation intensity on the farms of sample beneficiary and non-beneficiary farmers under ACABC scheme in U.P. analysed in Table V-43 indicates that the overall average net cultivated area per farm in case of beneficiary farmers was estimated as 1.63 ha against 1.70 ha in case of non-beneficiary farmers. Thus, average size of farms was slightly larger in case of non-beneficiary farmers than that in case of the beneficiary farmers in the area under study. Accordingly the gross cropped area per farm was also estimated to be comparatively higher in case of non-beneficiary farmers i.e. 3.91 ha per farm against 3.75 ha per farm in case of beneficiary farmers. Thus, the average cropping intensity on the farms of both types of sample farmers was similarly estimated as 230 per cent which very well clarified that almost all the farms were total cultivated during kharif and Rabi seasons and partly during zaid season too. The farms under the category of both agri.+ dairy services were found to be more intensive having comparatively higher cropping intensity i.e. 236% and 238% respectively.

Table-V-42

Category-Wise Comparative Cultivated and Irrigated Area with Irrigation Intensity on the Farms of Sample Beneficiary and Non-Beneficiary Farmers under ACABC Scheme in U.P.

(Area in Hect. Per farm, Irri. Intensity in %)

Sl.No	Category of Beneficiary & Non-Beneficiary Farmers	No. of Samples		Net -Cultivated Area		Net -Irrigated Area		Gross Irrigated Area		Irrigated Intensity (%)	
		Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers
A.	Proper Agri. Services										
I	Marginal Farmers	23	11	0.56	0.59	0.56	0.59	1.22	1.27	100	100
II	Small Farmers	7	1	1.60	2.00	1.60	2.00	3.48	4.00	100	100
III	Medium & Large Farmers	3	2	5.43	4.05	5.43	4.05	11.70	8.40	100	100
	Sub Total Proper Agri. Services	33	14	1.22	1.19	1.22	1.19	2.65	2.48	100	100
B.	Allied Agri. Services										
I	Marginal Farmers	3	2	0.70	0.45	0.70	0.45	1.57	0.92	100	100
II	Small Farmers	1	1	1.25	1.25	1.25	1.25	2.70	2.50	100	100
III	Medium & Large Farmers	3	1	3.83	2.50	3.83	2.50	8.5	5.00	100	100
	Sub Total Allied Agri. Services	7	4	2.12	1.16	2.12	1.16	4.70	2.34	100	100
C.	Both Agri. + Dairy Services										
I	Marginal Farmers	25	12	0.74	0.76	0.74	0.76	1.91	1.92	100	100
II	Small Farmers	16	7	1.54	1.44	1.54	1.44	3.70	3.48	100	100
III	Medium & Large Farmers	19	13	3.42	3.41	3.42	3.41	7.77	7.99	100	100
	Sub Total Both Agri.+ Dairy Services	60	32	1.80	1.99	1.80	1.99	4.25	4.73	100	100
	G. Total Beneficiary & Non Beneficiary Farmers	100	50	1.63	1.70	1.63	1.70	3.75	3.91	100	100

Table-V-43
Category-Wise Comparative Cultivated Area, Gross- Cropped Area and Cropping Intensity on the Farms of Sample Beneficiary and Non-Beneficiary Farmers under ACABC Scheme in U.P.

(Area in Hect. Per farm, Cropping Intensity in %)

Sl.No	Category of Beneficiary & Non-Beneficiary Farmers	No. of Samples		Net -Cultivated Area		Gross Cropped Area		Cropping Intensity (%)	
		Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers
A.	Proper Agri. Services								
I	Marginal Farmers	23	11	0.56	0.59	1.22	1.27	218	25
II	Small Farmers	7	1	1.60	2.00	3.48	4.00	217	200
III	Medium & Large Farmers	3	2	5.43	4.05	11.70	8.40	215	207
	Sub Total Proper Agri. Services	33	14	1.22	1.19	2.65	2.48	217	208
B.	Allied Agri. Services								
I	Marginal Farmers	3	2	0.70	0.45	1.57	0.92	224	204
II	Small Farmers	1	1	1.25	1.25	2.70	2.50	216	200
III	Medium & Large Farmers	3	1	3.83	2.50	8.5	5.00	221	200
	Sub Total Allied Agri. Services	7	4	2.12	1.16	4.70	2.34	222	202
C.	Both Agri. + Dairy Services								
I	Marginal Farmers	25	12	0.74	0.76	1.91	1.92	258	252
II	Small Farmers	16	7	1.54	1.44	3.70	3.48	240	242
III	Medium & Large Farmers	19	13	3.42	3.41	7.77	7.99	100	234
	Sub Total Both Agri.+ Dairy Services	60	32	1.80	1.99	4.25	4.73	236	238
	G. Total Beneficiary & Non Beneficiary Farmers	100	50	1.63	1.70	3.75	3.91	230	230

V.25.3. Comparative Inputs, Outputs, Net Income and Input- Output Ratios on the Farms of Sample Beneficiary and Non-Beneficiary Farmers under ACABC Scheme in U.P.

Category-wise comparative inputs, outputs, net income and input- output ratios on the farms of sample beneficiary and non-beneficiary farmers under ACABC scheme in U.P. analysed in Table V-44 indicate that on an overall average the total inputs per farm in case of beneficiaries was estimated as Rs 1,04,392 against Rs 99,828 per farm in case of non-beneficiaries. Thus, inputs incurred on the farms of beneficiaries were slightly higher than that on the farms of non beneficiaries. Accordingly the gross outputs per farm was also higher i.e. Rs 1,72,259 in case of beneficiaries against Rs 1,55,662 per farm in case of non-beneficiaries. Therefore, the net income per farm was estimated as Rs.55,834 in case of non- beneficiary farmers against Rs 67,866 per farm in case of beneficiary farmers. Thus, the input output ratio on an overall average was estimated as 1:1.65 in case of beneficiaries against 1:1.56 in case of non-beneficiaries. Hence, the turnover per farm was comparatively higher on the farmers of beneficiaries which indicate that there was effect of ACABC Scheme on the farmers.

Table-V-44
Category-Wise Comparative Inputs, Outputs, Net Income and Input- Output Ratios on the Farms of Sample Beneficiary and Non-Beneficiary Farmers under ACABC Scheme in U.P.

Sl.No	Category of Beneficiary & Non-Beneficiary Farmers	No. of Samples		Total Inputs (Rs/Farm)		Gross Output (Rs/Farm)		Net-Income (Rs/Farm)		Input-Output Ratios	
		Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers	Beneficiary Farmers	Non-Beneficiary Farmers
A.	Proper Agri. Services										
I	Marginal Farmers	23	11	47435	49949	72154	76891	24719	26942	1:1.52	1:1.54
II	Small Farmers	7	1	81283	90000	134630	117000	53347	27000	1:1.65	1:1.30
III	Medium & Large Farmers	3	2	221117	193500	334334	298250	113217	104750	1:1.51	1:1.54
	Sub Total Proper Agri. Services	33	14	80537	92517	132805	144728	52268	52211	1:1.64	1:1.56
B.	Allied Agri. Services										
I	Marginal Farmers	3	2	49316	30010	70800	45862	21484	15852	1:1.43	1:1.53
II	Small Farmers	1	1	92000	59000	154800	91000	62800	32000	1:1.68	1:1.54
III	Medium & Large Farmers	3	1	150484	111000	226249	155500	75765	44500	1:1.50	1:1.40
	Sub Total Allied Agri. Services	7	4	105971	65305	162969	95956	56998	30651	1:1.54	1:1.46
C.	Both Agri. + Dairy Services										
I	Marginal Farmers	25	12	55186	54183	88787	82606	33601	28423	1:1.60	1:1.52
II	Small Farmers	16	7	106222	100630	152292	143886	46070	43256	1:1.43	1:1.43
III	Medium & Large Farmers	19	13	202617	193639	337385	308961	134768	115322	1:1.66	1:1.59
	Sub Total Both Agri.+ Dairy Services	60	32	126669	141662	221002	226302	94333	84640	1:1.74	1:1.59
	G. Total Beneficiary & Non Beneficiary Farmers	100	50	104392	99828	172259	155662	67866	55834	1:1.65	1:1.56

CHAPTER-VI

VI. Summary of Main Findings, Conclusion and Policy Prescriptions

VI.1 Summary of Main Findings, and Conclusion

► This study reveals that the average size of holdings among the beneficiary farmers was very small i.e.1.63 ha. in the area under study. All the beneficiaries had availed benefits under ACABC Scheme in U.P. Also majority of beneficiaries were practicing subsidiary occupations along with their main occupations, enriching economic status.

► Regarding social status, it was found that there was preponderance of O.B.Cs (Other backward castes) among the beneficiaries of ACABC scheme in the state of Uttar Pradesh. Thus, O.B.Cs were dominating among the beneficiaries of ACABC Scheme.

► The level of education was considerable among the beneficiaries as there were 11 post graduates, 27 graduates, 26 H.S. and +2 and 36 non-matric in the total samples of 100. No training was reported to beneficiaries by the agri.-ventures.

► The gross cropped area during the kharif seasons was estimated as 1.63 ha per farm of beneficiaries and the total was irrigated. The gross cropped area during Rabi season too was equally and fully covered on the farms of beneficiaries under different services. While during zaid season no cereal crop was grown. Only other crops were grown and as a result the gross cropped area in zaid was 0.63 ha. per farm on an average.

► The gross cropped area of all the three season of the reference year was estimated as 3.75 ha. per farm and the total area was irrigated. Thus, gross irrigated area was equal to gross cropped area which confirms that the irrigation intensity was 100 percent in the area under study.

► Regarding inputs and outputs of kharif crops, it was found that the other inputs were on higher side than the own inputs. The maximum outputs were received from cereals after incurring maximum inputs on cereals. The minimum inputs were incurred on pulses and the minimum outputs were received from other kharif crops.

► Among the different categories it was found that farms under allied agri. services were the maximum income generating farms against the minimum income generating farms under the proper agri. services in the area under study and as such CABC scheme performed better in cases of the farms under allied agri. services to the farmers beyond the higher inputs.

- ▶ It was also found that conditions of the category of both agri.+ dairy services was favourable for cereal crops, category of proper agri. services for pulses and the category of allied agri. services for other kharif crops in U.P. under ACABC scheme.
- ▶ As regards the inputs and outputs of rabi crops on the farms of beneficiaries, it was found that outputs was comparatively much higher from other crops which confirms that other crops were cared more under ACABC scheme in the area of study.
- ▶ Regarding inputs on Rabi crops it was found that beneficiary farmers had invested more on other inputs which were purchased from the agri-ventures established in their areas under ACABC scheme in U.P. The inputs were incurred more on cereal crops as compared to that on pulses and other crops.
- ▶ Among the different categories of farms, it was found that the farms under the category of both agri.+ dairy services were comparatively more profitable having maximum outputs per farm beyond the maximum inputs incurred on the farms under this very category.
- ▶ The gross outputs from zaid cereals was reported nil as no zaid cereal crop was grown on any farm of any category of the sample farmers in the area under study.
- ▶ It was also evidently clarified that during zaid season only a few pulses and other crops including horticultural crops were grown in the whole area under study.
- ▶ It was also very well clarified that the farms under the category of both agri+ dairy services were more productive and profitable as compared to the farms under proper agri. services as well as allied agri. services in the whole area.
- ▶ As regards the inputs on zaid crops, the farms under the category of both agri+ dairy services were found to be more expensive than the farms under the other two categories in the area under study.
- ▶ Regarding outputs from the zaid crops it was safely concluded that in zaid season the farms under the category of both agri.+ dairy services were comparatively more profitable in the area of study. The net income per farm was accounted as Rs 59,215 on an overall average from all the crops.
- ▶ Among the inputs the other inputs procured from agri. ventures or elsewhere was found higher than the own inputs. This confirms that the sample beneficiaries had definitely availed the services of agri. ventures established in their areas.

- ▶ The farms under the category of both agri.+ dairy services were found to be comparatively more profitable, because the outputs per farm were comparatively much higher on the farms under the category of both agri.+ dairy services in the whole area of study.
- ▶ In case of incomes from milch animals it was found that the net income from milch animals reared by beneficiaries was Rs 25,613 per farm which was a considerable income in addition to raising crops on their farms in the area under study.
- ▶ The farms under the category of allied agri. services were found more productive and profitable in comparison of the farms under the categories of both agri+ dairy services in rearing milch animals because net income per farm was maximum i.e. Rs. 42,500 on the farms under the category of allied agri. services.
- ▶ It was also safely concluded on the basis of attractive additional income that rearing milch animals on the farms alongwith the other services was considerably profitable in the area under study.
- ▶ About income from draught animals it was found that the net income received from rearing draught animals was only Rs. 1,405 per farm which confirms that rearing draught animals was generally either in distress or in force of milch animals and as such it was quite uneconomic. Also other inputs were not at all incurred in rearing draught animals.
- ▶ Regarding incomes from other animals it was found that there was only a nominal net income of Rs 444 per farm which confirms that net income was quite negligible from rearing other animals too in the area under study.
- ▶ As regards the outputs and inputs of other animals it was found that the farms under the category of allied agri. services were comparatively more profitable in rearing other animals in the area under study. The inputs per farm were accordingly higher on the farms under the category of allied agri. services.
- ▶ Regarding outputs, inputs and net incomes from total animals reared by beneficiaries it was found that the farms under the category of allied agri. services were comparatively more productive in rearing animals on their farms in comparison of the farms under other two categories.
- ▶ The higher amount of other inputs incurred in rearing animals in comparison of own inputs clearly indicates that agri. ventures established under ACABC scheme have definitely supplied other inputs on payment to the beneficiaries in the area under study.

- ▶ About extension services to the beneficiaries it is evidently clear that majority of sample farmers had received extension services from the agri. ventures established successfully and majority of farmers had received extension services on farm machines and dairy etc.
- ▶ From hiring machines etc. it is clarified that the functioning of ACABC scheme was in nascent stage in the area understudy. The established agri. ventures had just started their business and hence they were found selling only the inputs such as seeds, fertilizers, animal feeds and pesticides etc.
- ▶ In case of hiring implements by beneficiaries from agri.-ventures it was obviously clear that ACABC scheme was just started in the area under study. The established agri. ventures were in nascent stage and hence they had not yet started hiring machines and implements to their beneficiaries in the area under study.
- ▶ As regards the inputs on payment by the agri.-ventures it was found that fertilizer was most expensive input followed by seeds in the area under study.
- ▶ Among the farms under different categories it was found that the farms under the category of both agri.+ dairy services were found to be more expensive as compared to the farms under the category of proper agri. services and allied agri. services in the area under study. The crops commonly grown on the farms of all he categories were paddy and wheat.
- ▶ Regarding training received by beneficiaries from agri. ventures out of 100 sample farmers 71 had told to receive only informal training and 29 had told for formal training which was useful but informal training was not at all useful for them.
- ▶ About supports from agri. ventures, almost all the beneficiary farmers had reported that there was availability of inputs and the full supports of agri. ventures established successfully in their areas.
- ▶ Out of 100 beneficiaries 66 had told to receive supports on marketing of outputs and 42 on production trends from the agri. ventures.
- ▶ Among the different categories the maximum i.e. 42 beneficiaries under the category of both agri.+ dairy services had told to receive supports on marketing of outputs from agri. ventures and under proper agri. services 22 out of 33 sample farmers had also received supports on marketing of outputs.

- ▶ The majority i.e.79 sample beneficiaries out of 100 sample farmers had reported to receive extension services and expert advices on farm technology from agri.-ventures which definitely increased the incomes of beneficiaries of ACABC scheme in U.P.
- ▶ 68 beneficiaries had told to increase their incomes through the extension services on cropping practices and 66 had reported to receive expert advices on protection from pests and diseases which increased their incomes definitely.
- ▶ 89 out of 100 sample farmers had reported that production of cereals particularly paddy in kharif and wheat in rabi season had increased definitely after the implementation of ACABC Scheme in their areas in U.P.
- ▶ 21 out of 100 sample farmers had told that production of their milch animals had increased satisfactorily after the establishment of agri-ventures under ACABC scheme in U.P. under their areas. Thus, incomes from cereals (paddy & wheat) and from milch animals had definitely increased in the area under study.
- ▶ About the sales of inputs and other services provided by agri. ventures to beneficiaries it was found that only the inputs such as seeds, fertilizers, pesticides and animals feeds were made available to the needy farmers on payment. No other services were provided except a few extension services and expert advices.
- ▶ Therefore, it is concluded that ACABC scheme in U.P. was in the nascent stage in the area under study. But it was a good beginning as opined and viewed by majority of beneficiaries.
- ▶ Among the sample non-beneficiary farmers the average size of holding was estimated as 1.70 ha. in the ACABC scheme area of U.P. The majority i.e. 44 out of 50 non-beneficiaries had subsidiary occupations and 6 had reported to have memberships of cooperative societies.
- ▶ Among the different categories non-beneficiaries the holdings were comparatively larger in the category of both agri.+ dairy services than that in the other two categories of non-beneficiary farmers.
- ▶ Regarding social and educational status of non-beneficiaries it was found that 37 out of 50 sample farmers were O.B.Cs., 10 were from general category and 3 were from scheduled castes. About their educational status, 22 were non-matric, 16 were higher secondary, 10 were graduates and the remaining two were post graduates' on an overall in the area under study. Maximum educated were in the category of both agri.+ dairy services.

- ▶ During kharif season the maximum of the cropped area was under cereals and other crops. The area under pulses was negligible.
- ▶ The coverage during kharif season was found to be better on the farms under the category of both agri.+ dairy services in comparison of the farms under proper agri. services and allied agri. services in the area under study.
- ▶ During rabi season too the maximum coverage was under rabi cereals and the coverage was better on the farms under the category of both agri.+ dairy services as compared to that on the farms of other two categories in the area under study.
- ▶ It was also found that among the non-beneficiary farmers, the medium and large farmers had grown cereals and other crops in larger areas than the marginal and small farmers who had grown only cereals in larger areas on their farms.
- ▶ During zaid season no cereal crop was grown at all on any farm in any category of non-beneficiary sample farmers. Pulses too were grown on a negligible area.
- ▶ Among different categories, the coverage under zaid crops too was comparatively higher on the farms under the category of both agri. +dairy services compared to that on the farms of other two categories in the area under study.
- ▶ It was also obviously clear that the farms under the category of both agri.+ dairy services were cropped more intensively in comparison of the farms under other two categories which confirms that effects of ACABC scheme were more on the farms of the category under both agri. + dairy services than that on the farms of other two categories.
- ▶ The maximum outputs i.e. Rs. 67,702 per farm was received from kharif cereals by investing maximum inputs of Rs. 33,641 per farm where in the other inputs were higher than own inputs on all crops.
- ▶ In case of non-beneficiary farmers too, the farmers under the category of both agr.+ dairy services were found to be comparatively more productive than the farms of other two categories in the area under study.
- ▶ Rabi crops on the farms of non-beneficiary farmers were significantly productive and profitable, other rabi crops were also found to be productive and farms under the category of both agri.+ dairy services were comparatively more productive investing higher inputs.
- ▶ Among zaid crops only other crops were grown on the farms of the non-beneficiaries of the category of both agri. + dairy services in the area under study.

- ▶ The farms of non-beneficiaries under the categories of both agri.+ dairy services and proper agri. services were comparatively more productive. While the net income per farm was highest on the farms under the category of both agri. + dairy services.
- ▶ About the net income from milch animals it was found that there was a net income of Rs. 17,451 per farm which confirms that milch animals reared by non-beneficiary farmers were assured sources of their income.
- ▶ The outputs per farm received from milch animals was highest on the farms under the category of allied agri. services as compared to that on the farms under the categories of proper agri. services and both agri.+ dairy services. Thus, the net income was highest on the farms under the category of allied agri. services.
- ▶ Regarding incomes from the draught animals, there was a nominal net income of only Rs.283 per farm which indicates that rearing draught animals by non-beneficiary farmers was done in distress as it was most uneconomic.
- ▶ The net income from other animals was also too scanty as Rs.873 per farm only and was higher on the farms under the category of proper agri services in the area under study.
- ▶ The net income from total animal of Rs. 18,876 per farm was a considerable income in addition to the income from crop enterprises on the farms of non-beneficiary farmers in the area under study.
- ▶ The output per farm was highest on the farms under allied agri. services which confirms that incomes from rearing animals on the farms of non-beneficiary farmers were considerable on an average.
- ▶ Majority of non-beneficiary farmers were not at all aware about agri. clinic and agri. business centres. Those who were aware, they had not availed the services of agri.-ventures due to long distances and inputs being costly. It was also clarified that ACABCs were just established recently in the area under study.
- ▶ The majority of non-beneficiary farmers had reported not to receive any such extension services from any of the government line departments or any private agencies related to agricultural extension services. Among different categories of services, the category of both agri. + dairy services had performed better in the area under study.
- ▶ Regarding satisfaction with inputs and outputs, one fourth of the non-beneficiaries had told to be satisfied with inputs and 50 per cent of non-beneficiaries had to be satisfied with

outputs and those who were unsatisfied had told adulteration in puts to be the main reason for low outputs.

▶ The net cultivated area in cases of both types of sample farmers was reported to be irrigated under all the three categories of sample farmers.

▶ It was also found that the beneficiary farmers under allied agri. services and non-beneficiary farmers under both agri.+ dairy services were comparatively more prosperous in the area under study. The irrigation intensity on all the farms under all the categories was estimated as 100 percent.

▶ The average size of farms was slightly higher in case of non-beneficiary farmers than that in case of the beneficiary farmers and as such gross cropped area per farm was also comparatively higher in case of non-beneficiary farmers.

▶ The average cropping intensity on the farms of both types of sample farmers was similarly estimated as 230 percent which clarified well that almost all the farms were totally cultivated during kharif and rabi season and partly during zaid season.

▶ The inputs incurred and outputs received both were higher on the farms of beneficiaries. Therefore, the net income per farm was considerably higher on the farms of beneficiaries. The input-output ratio also indicated that turnover was higher on the farms of beneficiaries which clarified that there were effects of ACABCs scheme on farmers in U.P.

VI.2. Policy Prescriptions

Based on the main findings of the present study, the following policy prescriptions are being conveyed to the DAC, Ministry of Agriculture and Farmers welfare, Government of India.:-

▶ Since, only small farmers of a poor section (O.B.Cs.) of farming societies could have been attracted so far by the established agri. ventures. Therefore, agri. ventures must strengthen their agri. extension services more profoundly through more and more demonstrations as well as training programmes on the fields of beneficiary farmers.

▶ When the total area was irrigated on almost all the sample farms then why the coverage under zaid season was scanty. The agri. ventures must cooperate and support their beneficiary farmers to increase their coverage during zaid for increasing their cropping intensity.

▶ Growing cereal crops was most expensive to majority of beneficiaries. Hence, they must shift to pulses or other crops which require minimum inputs. The agri. ventures must encourage their beneficiaries to grow other crops (vegetables or cash crops).

- ▶ As the farms under the category of allied agri. services were found more productive and profitable. Therefore, farmers must shift to rearing milch animals on their farms for more profit.
- ▶ On the basis of attractive additional income through rearing milch animals alongwith other services which was considerably profitable in the area of study, the farmers must adopt this service on their farms. Agri. ventures must also support about such adoption of services.
- ▶ The agri. ventures have been found supplying more other inputs for rearing milch animals under ACABC scheme. This practice must be increased on larger scales so that more and more farmers may shift towards rearing the milch animals on their farms.
- ▶ Since majority of beneficiary farmers had received extension services on machines and dairying, they must be given more and more extension services through more demonstration and training programmes.
- ▶ It has been found that the functioning of ACABC scheme was on nascent stage in the area under study and the agri. ventures were found selling only a few inputs. Hence, the agri. ventures must firstly demonstrate and train farmers about the use of inputs then the inputs will be sold automatically.
- ▶ Majority of beneficiaries had told about informal training to them by agri. ventures which was not at all useful. Hence, only formal training of long duration must be facilitated to all the beneficiary farmers.
- ▶ Among the supports to beneficiaries by agri. ventures only supports on marketing of outputs and production trends was given half heartedly. Hence, every agri. venture must arrange for full supports to farmers on all the aspects of every enterprise adopted.
- ▶ Among the extension services and expert advices, the majority farmers told that these were on cropping practices and protection from pests and diseases, which increased their incomes definitely. Therefore, expert advices on other aspects of farming starting from preparation of land to final disposal of outputs will certainly increase their income. So agri. ventures must take utmost care of it.
- ▶ Although, ACABC scheme was in nascent stage, but it was a good start as opined by majority of farmers. Therefore, all the concerned agencies such as MANAGE, NABARD, Ministry of Agriculture and Farmer Welfare, Government of India and NTIs must envision to make the ACABCs purposeful for the needy farmers.

- ▶ Among the non-beneficiary farmers also their holding size economic, social and educational status was more or less similar and there was dominance of O.B.Cs on an overall all average. They must take benefits of ACABC scheme.
- ▶ The cropping pattern of non-beneficiary farmers was also similar as during kharif and rabi seasons the coverage under cereal crops (Paddy and Wheat) was higher and during zaid only pulses and other crops were grown only by a few farmers. Irrigation intensity was 100 percent. Hence, zaid coverage must be increased by the farmers.
- ▶ Among non-beneficiaries too, the farms under the category of both agri. + dairy services were cropped more intensively in comparison of the farms under the other two categories and as a result the farms under both agri. + dairy category were more productive. Hence, the farmers of other two categories must adopt both agri. + dairy services on their farms.
- ▶ Rearing milch animals by non- beneficiaries on their farms in addition was found to be an assured source of their income. Therefore, farmers must adopt this service to increase their income.
- ▶ Majority of non-beneficiary farmers were not al all aware about the ACABCs scheme. Therefore, more demonstrations and extension on large scale are required by all the implementing agencies involved under ACABC scheme.
- ▶ Only one fourth of the sample beneficiary farmers were satisfied with inputs and 50 percent were satisfied with outputs and those who were unsatisfied told the main reasons i.e. adulteration in inputs and costly inputs for low outputs on their farms.
- ▶ As the beneficiary farmers under allied agri. services and non-beneficiary farmers under both agri.+ dairy services were found to be more profitable. Therefore, these two main services must be adopted by all the farmers for prosperity.
- ▶ The average cropping intensity on the farms of both beneficiaries and non- beneficiaries was similarly estimated as 230 percent. Therefore, it must be increased atleast to 300 percent when the farms are 100 percent irrigated in the area under study.
- ▶ The net income per farm as well as the turnover was higher on the farms of beneficiary farmers than that on the farms of non-beneficiary farmers. Therefore, it is concluded that it was definitely the effects of the implementation of ACABCs scheme in the area of study in U.P.

▶ It is to be examined whether there is any need for increasing the number of NTIs in the country.

▶ Issue of one NGO running multiple NTIs be examined.

▶ Issue of providing advanced learning equipments in the experience for better learning experience by the trainees to be examined.

▶ Issue of providing the network system of trainees and trained candidates with, Govt., MANAGE, NABARD etc.

▶ Suggestions to overcome the difficulties faced by the entrepreneurs to avail credit facilities from banks.

Appendix-I

Minutes of the discussion with Officials of AERC, University of Allahabad on the Draft Report on the Evaluation study “Impact Study on Agricultural Extension Services to Farmers by Agri-clinics and Agri.- Business Centres AC&ABC Scheme” held in Room No. 188A, Krishi Bhawan, New Delhi, at 10.30 AM on 05.05.2017, under the Chairmanship of Director (Extension)

The following official were present in the discussion.

1. Dr. H.C. Malviya, Research Associate, AERC, University of Allahabad
2. Sri Hasib Ahmad, Research Associate, AERC, University of Allahabad
3. Dr. Rajendra Singh, Ex. Research Officer, AERC, University of Allahabad
4. Sri Sajith Kumar Kunhalath, JD(EM), DOE, Pusa

A detailed discussion was made on the Draft Report on the study submitted by AERC Officials from AERC informed that the present report pertains to only Uttar Pradesh and the reports of other three sample states, viz Maharashtra, Telengana and Assam are under preparation. During discussion, the following suggestion on issues to be examined while conducting the studies emerged.

- I. Reports from Maharashtra, Telengana and Assam also to be prepared and the compiled report of all the four sample states to be furnished by 30th of June 2017.
- II. Suggestions for changes in Scheme pattern like given below for better implementation of the scheme may be included in the report.

a) Escalation of Total Financial Outlay (TFO) eligible for subsidy to be examined.

b) It is to be examined whether there is any need for increasing the number of NTIs in the country

c) Issue of one NGO running multiple NTIs be examined.

d) Issue of providing advanced learning equipments in the experience for better learning experience by the trainees to be examined.

e) Issue of providing the network system of trainees and trained candidates with, Govt., MANAGE, NABARD etc.

f) Issue of revising the qualification of trainees to accommodate non-agricultural, but high educated candidates who wish to come in the line of agri-business with inclusion of extended period of training/bridge courses.

g) Involving more number of Implementing Agencies (say MANAGE like institutes in region wise for better implementation and monitoring to be examined.

h) Examined the need for revising the training cost provisions from the existing Rs.35000/- per candidate which was fixed in 2010.

i) Suggestions to overcome the difficulties faced by agripreneurs to avail credit facilities from banks.

J) Revision of Hand-holding period for Nodal Training Institutes (NTIs) from the existing one year.

The discussion ended with the vote of thanks to the Chair

Appendix-II

Action Taken on the suggestions given by Director Extension on 5.5.2017.

- I. Draft Report from Telengana still not received. Compilation on the draft reports from Maharashtra and Assam is in progress and likely to be expedited by 30th of June, 2017.
- II. The following suitable suggestions for changes in the patterns of the ACABC Scheme have been incorporated in the finalized report of individual state of Uttar Pradesh for better implementation of the scheme under the policy prescriptions conveyed to the DAC, Ministry of Agriculture and Farmers Welfare, G.O.I.
 - (b) It is to be examined whether there is any need for increasing the number of NTIs in the country.
 - (c) Issue of one NGO running multiple NTIs be examined.
 - (d) Issue of providing advanced learning equipments in the experience for better learning experience by the trainees to be examined.
 - (e) Issue of providing the network system of trainees and trained candidates with, Govt., MANAGE, NABARD etc.
 - (i) Suggestions to overcome the difficulties faced by the agrepreneurs to avail credit facilities from banks.

