Chapter-V

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The average agricultural production in India is very low in comparison to other developed countries. One of the most important factors responsible for the low productivity anywhere in the world is lack of integration to new farm technology in the farming practices of Social System. An effective extension system is an important Per-requisite for effective transfer of agro-technology for high Production per unit area per unit time and also per unit input.

Since independence, a number of developmental programmes have been launched from time to time, to educate the farmers in the appropriate use of the latent technical know-how. In 1960, first attempt was made to organize farmers training through the project known as "Intensive Agricultural district Programme."

The National Commission on Agriculture (1971-73), while emphasizing the scope and importance of vocational education and training, observed, with a view to meeting the needs of development in agriculture and related activities, we should plan for each district to have ultimately one Centre to provide for regular short duration training in agriculture and agro-industries. Such a Centre may be a Krishi Vigyan Kendra (KVK).

The Indian Council of Agricultural Research (ICAR), New Delhi an apex body which directly governs about 48 research institutions in the field of agriculture and animal sciences, is unique in having dual responsibility both for promoting agricultural research and education. The ICAR felt that the present training infrastructure in the country was not sufficient to meet the training needs of the farmers and as a result, the process of transfer of technology had been slow. Accordingly a committee was set up under the chairmanship of Mohan Singh Mehta to consider the probable reasons of failure of farmers training institutions in transferring the technology, and suggest actions thereupon.
The committee submitted its report in 1974 and suggested the establishment of KVK (Krishi Vigyan Kendra). The recommendation was accepted by the ICAR and the KVK scheme was launched in year 1974. The KVK has been conceived as an institution for vocational training at the grass root level, designed for bridging the gap between the available technologies on the one end and their application for increasing production on the other. The frontline transfer of technology system of the ICAR presently includes a network of 551 Farm Science Centres commonly known as krishi Vigyan Kendra (KVKs) and 10 Trainers' Training Centres (T.T.Cs.). The activities of the KVKs, which were initially confined to farmer's training and on-farm demonstrations have been further extended to cover in-service training of extension personnel so as to upgrade their skills in new technologies and the vocational training of farm youths. At present the activities of KVK include skill training of farmers by providing work experience following the principle of 'teaching by doing' and 'learning by doing' in agriculture and allied areas; on farm testing to identify the location specificity of technologies in various farming system; in service training of extension personnel to update their knowledge in frontier areas of agricultural technologies, and organising frontline demonstration to establish production potential on farmers field and provide feed back. These KVKs organise about 13.9 thousand training programmes benefiting 8.0 lack farmers and farm women. Similarly three thousand vocational and skill oriented training courses are also organized for 1.6 Lakh rural youths.

The present investigation concentrated on KVK, Basti implemented and executed by N.D. University of Agri. & Tech. Kumarganj Faizabad (U.P.) in order to ascertain as to what extent, the functioning of Krishi Vigyan Kendra and its impact on adoption of agricultural technology conducted by the KVK lia has affected the level of knowledge, attitude and adoption behavior as well as socio-economic conditions of the trainees.
The main objectives of the investigation have been:

1. To determine and compare the socio-economic and psychological profile of trainees and non-trainees.

2. To determine and compare the knowledge and attitude of trainees and non-trainees towards KVK training programmes.

3. To assess the impact of training programmes on the adoption of farm technologies.

4. To examine the relationship between socio-economic personal profiles of the respondents and adoption of farm technologies.

5. To study the constraints experienced by the trainees for adoption of farm technologies.

6. To study the constraints experienced by the trainers of KVK for organizing training programmes.

KVK, Basti was taken up purposively because of the investigator's acquaintance with the locales of the trainees, the availability of sufficient number of potential trainees and non-trainees, researcher's command over the local language of the area, almost similar socio-economic conditions of the inhabitants of this area. Basti KVK covers 13 blocks and 1050 villages, out of these 8 villages were selected. The criteria being the large number of trainees in each selected village. The list of trainees thus, prepared was divided enterprise-wise. Thus, in all 120 trainees and 120 non-trainees were selected from 8 villages of the 4 blocks in the district. For the analysis of data the major 6 groups of trainees viz, paddy, wheat, tomato, brinjal, kitchen gardening and fisheries were taken up. Statistical measures like, average, percentage, \(X^2\) test, ‘Z’ test, ‘t’ test, correlation coefficient have been employed.

It has no significance to mention repeatedly the efficacy of the specific findings brought out in the study. As such passing through the references, the implications of these findings in relation to the objectives of the study were considered.
MAIN FINDING OF THE RESEARCH STUDY:

Personal Profile:

Majority (more than 50 per cent) of the trainees as well as non-trainees for almost all the enterprises belong to the middle age group i.e. of age above 35 and up to 55 years.

Majority of the respondents in trainee group as also non-trainee group belonged to OBC (Other Back ward Class) with respective percentage as 69.17 per cent and 55 per cent of the total respondents.

The majority of the respondents, whether in trainee or non-trainee groups are educated only up to Intermediate level, followed by only a very few respondents being graduates or of higher qualification.

The main occupation of the respondents has been agriculture for both the types of respondents, i.e. of trainee group and non-trainee group (76.67 per cent of the total respondents).

 Majority of respondents corresponds to a unit i.e. a single family for total sample as well as enterprise wise, whether a trainee or non-trainee group. This percentage of respondents is relatively higher in non-trainees group as compared to trainee group.

Majority of respondents have their family size restricted to only five members, whether trainees or non-trainees. On the whole, 63.33 per cent total respondents have had their family up to 5 while 36.67 per cent were having above 5 in the trainees group, with the corresponding percentage for non-trainee group being 72.50 per cent and 33 per cent.

It can be judged that 44.17 per cent trainees and 36.67 per cent non-trainees were found in medium income group ranging from above Rs. 30,000 to Rs. 60,000 while 27.50 per cent trainees and 20 per cent non-trainees was in high income group of above Rs. 60,000. It is also noticed that 43.33 per cent non-trainees and only 28.33 per cent trainees were found in low-income group i.e. up to Rs. 30,000. This may be attributed to higher adoption of agricultural technology.
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Majority (39.17 per cent) of trainees and (49.17 per cent) non-trainees live in kachcha houses. Only 28.33 per cent trainees and 24.17 per cent non-trainees possessed pucca houses. While similar percentage of both the groups live in mixed type of houses.

Majority of the total respondents whether in trainee or non-trainee group owned a single i.e. only one house, for the total sample as well as for enterprises; except adopters of brinjal, where 25 per cent owns two or three houses whether a trainee or a non-trainee.

Majority of trainees (50.83 per cent) and non-trainees (60 per cent) of the total respondents had small land holding (up to 0.5-1 hectare).

Majority (83.33 per cent) of trainees have fully irrigation facility as compared to those of non-trainees i.e. 65.83 per cent.

It can be judged that 32.50 per cent trainees and 33.33 per cent non-trainees having source of hired electric/diesel pump set followed by own pump set for irrigating their crops.

Majority (52.67 per cent) of trainees having animals, ranging from 3 to 5 animals whereas non-trainees (46.67 per cent) had only up to 2 animals.

Majority (56.67 per cent) of the trainees were found to be the member of one organisations while majority (67.50 per cent) of non-trainees having no membership in any organization. However 29.17 per cent non-trainees were found to be member of only one organisation.

Majority of respondents have farm experience of more than 10 years, whether in trainee group or non-trainee group, with respective percentages in these two groups as 56.67 per cent and 57.50 per cent.

Majority of the respondents correspond to low and medium categories i.e. posses number of farm materials up to 10.
It can be judged that 38.33 per cent trainees are having more non-farm materials than non-trainees (20 per cent) of the total respondents. This indicates that trainees are more advanced than non-trainees.

Majority of trainees (69.17 per cent) have high level of formal source of extension contacts, whereas only 32.50 per cent non-trainees had high level of contacts. It shows that trainees are more motivated to have agricultural innovation than non-trainees.

Majority (75.83 per cent) of trainees have high level of informal sources of extension contact than non-trainees (50.83 per cent) for seeking the information related to farm business. Enterprise wise the same trend was also observed.

Most of the trainees were found to be exposed to mass media either at average level (40.83 per cent) or high level. Whereas non-trainees were found in majority (44.17 per cent) to low level of mass media exposure followed by average and high level, respectively. This shows that trainees are very particular for adopting these enterprises.

**Socio – Economic Status of Respondents :**

Majority of trainees had medium socio-economic status (48.33 per cent) followed by low socio-economic status (35 per cent) and only 16.67 per cent had high level of socio-economic status, whereas, in case of non-trainees 55.33 per cent had low socio-economic status followed by 37.50 per cent medium level and only 2.50 per cent high level of socio-economic status. Thus, it is concluded that there has been a significant difference between trainees and non-trainees regarding their socio-economic status. Trainees have higher socio-economic status than the non-trainees.

**Knowledge of Respondents about KVK Training Programmes :**

Majority (69.17 per cent) of the trainee respondents had high level of knowledge followed by medium level of knowledge (28.33 per cent) and low level of knowledge (2.50 per cent), whereas in case of non-trainees 74.17 per cent respondents had medium
level of knowledge, 15 per cent had high level of knowledge followed by 10.83 per cent who had low level of knowledge. This indicates that there has been a significant difference between the trainees and non-trainees with regard their knowledge about KVK training programme. Thus, we conclude that the trainees have more knowledge about the KVK training programme than the non-trainees.

**KNOWLEDGE LEVEL OF Respondents ENTERPRISEWISE:**

**Knowledge Level of Respondents of Paddy Crop:**

Majority of the trainee respondents have high level of knowledge (80 per cent), followed by medium level of knowledge (20 per cent), whereas in case of non-trainees, 85 per cent respondents have medium level of knowledge followed by 5 per cent each, low and high level of knowledge. It means that there is significant difference between trainees and non-trainees regarding the knowledge about the package of practices about paddy crop. We, therefore, may conclude that trainees have greater knowledge than the non-trainees about paddy crop, as was expected.

**Knowledge Level of Respondents of Wheat Crop:**

In this case, all the trainees have high level of knowledge (100 per cent); whereas in case of non-trainees, 60 per cent correspond to high level of knowledge, 35 per cent to medium level of knowledge while only 05 per cent low level of knowledge. It may be concluded that there has been significant difference between trainees and non-trainees regarding the knowledge about the package of practices of wheat crop. Trainees have greater knowledge about wheat technology than the non-trainees.

**Knowledge Level of Respondents of Tomato Crop:**

Majority of respondents have high (60 per cent) level of knowledge about tomato technology followed by medium level of knowledge (35 per cent), whereas, in case of non-trainees, 55 per cent medium level of knowledge followed by 40 per cent low level of knowledge and only 05 per cent high level of knowledge. There has been significant
difference between trainees and non-trainees regarding the knowledge about the package of practices of tomato crop. We, therefore, may conclude that trainees have greater knowledge than the non-trainees about tomato crop technology.

Knowledge Level of Respondents of Brinjal Crop:

Majority of the trainees respondents have high (60 per cent) level of knowledge, followed by medium level of knowledge (40 per cent), whereas, in the case of non-trainees 50 per cent respondents have medium level of knowledge, 30 per cent low level of knowledge followed by 20 per cent high level of knowledge. There is significant difference between trainees and non-trainees regarding their knowledge about improve package of practices about brinjal crop. We, therefore, conclude that trainees have greater knowledge than the non-trainees about brinjal crop farming.

Knowledge Level of Respondents of Kitchen Gardening:

Majority of trainees correspond to high (65 per cent) level of knowledge followed by medium level of knowledge (35 per cent), whereas, in case of non-trainee farmers, 90 per cent have medium level of knowledge followed by only 5 per cent each who have low and high level of knowledge. It means that there is significant difference between trainees and non-trainees regarding the knowledge about the package of practices about kitchen gardening. We, therefore, may conclude that trainees have more knowledge than the non-trainees about kitchen gardening technology as was also expected.

Knowledge Level of Respondents of Fisheries:

Majority of the trainee respondents (60 per cent) have high level of knowledge, followed by medium level of knowledge (40 per cent), whereas, in case of non-trainees 70 per cent respondents have medium level of knowledge. 25 per cent low level of knowledge followed by only 5 per cent with high level of knowledge.

It may therefore be concluded that there is significant difference between trainees and non-trainees regarding their knowledge about fish farming. Trainees have greater knowledge about fish farming than non-trainees, as was also expected.
ATTITUDE OF RESPONDENTS TOWARDS KVK TRAINING PROGRAMMES:

In case of trainees all the respondents i.e. 100 per cent have high level of attitude, towards KVK training programme; while in case of non-trainees 83.33 per cent have high level of attitude followed by 16.67 per cent with medium level of attitude. This showed that trainees have more favorable attitude towards KVK training programme significantly changed the attitude of farmers in the desired direction, which one could easily expect. Trainees as also non-trainees agreed on the following statements:

1. For the sake of convenience trainers spare sufficient time for discussion.
2. The course content in KVK programme is well designed.
3. Because of the KVK training, farmers have considerably increased their production of agriculture.
4. KVK provides unique opportunity to the farmers for undergoing need based skill oriented training.
5. It is strongly felt that more number of KVKs should established.
6. The KVK makes planning for each season in general well in time about training programme.
7. KVK conduct well attended training programme as well, on-campus and off-campus, to the farmers.
8. The farmers get all sorts of technology help from the KVK in relation to agricultural matters.
9. KVK has added significantly, to the farmer’s knowledge about few improved methods of farming.
10. The trainee farmers find answer for their immediate problem by the trainers.

However trainees were found to be undecided while the non-trainees observed disagreement on the following statement.

1. The trainers talk about something, which the farmers do no need.
2. KVK maintained poor co-ordination with the other organization engaged in the farmers training.
Whereas trainees and non-trainees showed their disagreement on the following statements:

1. The majority of the farmers attending training programme are not selected as per their needs.

2. The courses content are not useful to the majority of the farmers.

3. The farmers will not be adversely affected if the KVK is closed.

4. The training programme of KVK are not planned according to season and time.

5. The training method followed at KVK is not in accordance with the course content.

6. KVK training facilities are available only to the new selected farmers.

7. The training approach is not innovative but simply a traditional.

8. There is no adequate follow up of the training programmers at KVK.

Therefore, it can be concluded that MWS (Mean weighted score) shows that trainees have clear positive response towards KVK training programme than the non-trainees.

ADOPTION OF FARM TECHNOLOGIES:

Adoption of Improved Practices in Paddy Crop:

Most of the trainee farmers (85 per cent) have higher level of adoption followed by medium level (15 per cent), whereas most of the non-trainees have medium level of adoption (60 per cent) followed by low level of adoption (30 per cent). It is therefore, concluded that trainee farmers have higher level of adoption and also higher mean score as compared to the non-trainee farmers.
Adoption of Improved Practices in Wheat Crop:

Most of the trainees (80 per cent) have higher level of adoption followed by medium level (15 per cent), whereas most of the non-trainees have medium level of adoption (74 per cent) followed by low level of adoption (20 per cent). Thus, it is concluded that wheat trainees have higher level of adoption of recommended package of practices than the non-trainees.

Adoption of Improved Practices in Tomato Crop:

Most of the trainee farmers have higher level of adoption i.e. 80 per cent followed by medium level (20 per cent), whereas in case of non-trainees, majority of farmers have medium level of adoption (50 per cent) followed by low level of adoption (45 per cent). Thus, it is concluded that tomato grower trainees have higher level of adoption of recommended technology than the non-trainees.

Adoption of Improved Practices in Brinjal Crop:

Most of the trainees (80 per cent) have higher level of adoption followed by medium level (20 per cent), whereas most of the non-trainees have medium level of adoption (65 per cent) followed by low level of adoption (30 per cent). It is concluded that brinjal growing trainees have higher level of adoption of recommended technology than the non-trainees.

Adoption of Kitchen Gardening Technology:

Majority of the trainee farmers (80 per cent) have higher level of adoption followed by medium level (20 per cent), whereas majority of the non-trainees have low level of adoption (70 per cent) followed by medium level of adoption (30 per cent). It is concluded that kitchen gardening trainees have higher level of adoption of recommended package of practices than the non-trainees.
Adoption of Improved Practices in Fisheries:

All of the trainee farmers correspond to higher level of adoption, whereas in case of non-trainees, majority of the fish farmers have medium level of adoption (90 per cent) followed by low level of adoption i.e. 10 per cent. Thus it is concluded that fisheries trainees have higher level of adoption of recommended technology than the corresponding non-trainees.

Relationship Between Various Socio-Economic Cum-Personal Characteristic(s) and the Level of Adoption (Paddy Adopters):

The significant values are indicative of the fact that there is impact of one factor on the other i.e. informal source of extension contact in case of trainee group, while, herd size and formal source of extension contact in case of non-trainee group, respectively, on extent of adoption of improved agricultural technology.

The insignificant values of $\chi^2$ in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only the lower side in case of non-trainee group. Respectively. This indicates that lower side in of non-trainee group, respectively. This indicates that (a) paddy adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum socio-economic characteristics, resulting to such a low response values, in terms of $\chi^2$ while (b) contrary trainee group, the paddy adopters in case of non-trainee group are still lagging much behind in respect of attaining desired level of characteristics and that much has to be done in their case.
Relationship Between Various Socio-Economic Cum-Personal Characteristic(s) and the Level of Adoption (Wheat Adopters):

There is not even a single value, which is significant in trainee group; while in case of non-trainee group there is however one value, which is significant. This is in case of testing association between caste and extent of adoption. This indicates that caste is playing a vital role in adoption of improved agricultural technology in case of non-trainee group.

Insignificant value in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only towards the lower side in case of non-trainee group, respectively. This indicates that wheat adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum-socio-economic characteristics resulting to such a low responsive values and the wheat adopters in case of non-trainee group are still lagging much behind in attaining the desired level of these characteristics.

Relationship Between Various Socio-Economic-Cum-Personal Characteristic(s) and the Level of Adoption (Tomato Growers):

There is not even a single value, which is significant in case of trainee group while, in case of non-trainee group there is one value which is significant in case of testing association between formal source of extension contact and extent of adoption. This indicates that informal source of extension contact is playing a vital role in adoption of improved agricultural technology in case of non-trainee group.

Insignificant value in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only towards the lower side in case of non-trainee group, respectively. This indicates that tomato crop adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum-socio-economic characteristics resulting such a low responsive value, in terms of contrary to trainee group, the tomato crop adopters in case of non-trainee group are still lagging much behind in attaining the desired level of these characteristics.
Relationship Between Various Socio-Economic-Cum Personal Characteristic(s) and the Level of Adoption (Brinjal Growers):

There is not even a single value, which is significant in case of trainee group, while in case of non-trainee group there is however one value, which is significant and this is in case of testing association between knowledge about brinjal crop and extent of adoption. This indicates that knowledge is playing a vital role in adoption of improved agricultural practices in case of non-trainee group.

Insignificant values in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only towards the lower side in case of non-trainee group, respectively. This indicates that brinjal adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum-socio-economic characteristics resulting such a low responsive values, in contrary to trainee group. The brinjal adopters in case of non-trainee group are still lagging much behind in respect of attaining the desired level of these characteristics and much has to be done in their case.

Relationship Between Various Socio-Economic-Cum-Personal Characteristic(s) and the Level of Adoption (Kitchen Garden Adopters):

There is not even a single value, which is significant in case of trainee group, while in case of non-trainee group, there are two values which are significant and this is in case of testing association between age, education vs. extent of adoption. This indicates that age and education is playing a vital role in adoption of improved agricultural technology in case of non-trainee group.

Insignificant values in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only towards the lower side in case of non-trainee group. This indicates that a kitchen gardening adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum-socio-economic characteristics resulting such a low responsive values, in terms of $\chi^2$. Contrary to trainee group, the kitchen garden adopters in case of non-trainee group are still lagging much behind in attaining the desired level of
these characteristics.

**Relationship Between Various Socio-Economic-Cum-Personal Characteristic(s) and the Level of Adoption (Fisheries Adopters):**

In case of trainee as also non-trainee group there is not even a single value, which is significant at 5 per cent level of significance for testing association between various psycho-cum-socio-economic characteristics and extent of adoption.

This indicates that there is no association between various psycho-cum-socio-economic characteristics and extent of adoption.

Insignificant values in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only towards the lower side in case of non-trainee group. This indicates that fisheries adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum-socio-economic characteristics resulting such a low responsive values, in terms of $\chi^2$. Contrary to trainee group, the fisheries adopters in case of non-trainee group are still lagging much behind in attaining the desired level of these characteristics.

**CONSTRAINT EXPERIENCED BY TRAINEES FOR ADOPTION OF FARM TECHNOLOGIES:**

Most important constraint felt by the trainees has been the low prices of the high value crops during the peak period, ranking 1st (87.50 per cent), the risk bearing capacity of the farmers ranked IIInd (84.67 per cent), high cost of improved technology ranked IIIrd (81.67 per cent), small size of the farm ranked IVth (79.17 per cent) followed by inadequate inputs required for adoption ranking Vth (70.83 per cent). Whereas in case of non-trainees, poor knowledge regarding plant protection measures and control of weed technology ranked 1st (90 per cent), poor knowledge regarding high yielding varieties and poor knowledge regarding use of farm implements technology ranked IIInd and IIIrd (86.67 per cent and 83.33 per cent), poor knowledge regarding seed production technology ranked IVth (88.83 per cent) followed by low prices of the high value crops
during the peak period with rank Vth (84.17 per cent). It should be realized by the trainees that the training alone can not lead to adoption.

CONSTRAINT EXPERIENCED BY TRAINERS FOR ORGANIZING TRAINING PROGRAMMES:

Majority of trainers (80 per cent) facing the constraints ranked 1st i.e. no incentives for extra work and holiday work, 50 per cent ranked 2nd i.e. village panchayat do not co-operate in organizing training programme and it is difficult to provide inputs immediately or after training programmes, 40 per cent trainers ranked 3rd i.e. trainees are not ready to come for on-campus training and inadequate facilities for practical training, 30 per cent trainers ranked 4th i.e. lack of the contingency funds for critical input and transport facilities for field visits and practical training followed by 20 per cent ranked 5th i.e. lack in the skill of preparing audio visual aids and no sufficient practical facilities for imparting training.
CONCLUSION

On the basis of findings of the present study the following conclusions have been drawn:

1. Majority of the trainees as well as non-trainees belonged to the middle age group

2. Majority of the trainees as well as non-trainees belonged to the OBC (Other Backward Class).

3. Majority of the respondents, whether in trainee or non-trainee groups are educated up to Intermediate level.

4. The main occupation of the respondents has been agriculture, for both the types of respondents i.e. trainees and non-trainees.

5. Majority of respondents correspond to a unit i.e. a single family unit and restricted to their family size only five members, whether trainees or non-trainees.

6. Trainees have more annual income than the non-trainees.

7. Majority of trainees and non-trainees live in kachcha houses and owned single house, except adopters of brinjal who owned two to three houses; whether, trainees or non-trainees.

8. Majority of trainees and non-trainees have small land holding (up to 1 hectare).

9. Majority of trainees have fully irrigation facility as compared to the non-trainees.

10. Trainees and non-trainees have source of hired electric/diesel pumpset, for irrigating their crops.

11. Majority of trainees are having 3 to 5 animals whereas non-trainees have up to 2 animals only.

12. Majority of the trainees have membership of one organisation while majority of non-trainees are not having membership of any organisation.
13. Majority of respondents have farm experience of more than 10 years in both the cases i.e. whether in trainee group or non-trainee group.

14. Majority of the respondents correspond to low and medium categories i.e. posses number of farm materials up to 10.

15. Trainees have more non-farm materials than the non-trainees.

16. Majority of trainees have high level of formal and informal sources of extension contact than the non-trainees for seeking the information related to farm business.

17. Most of the trainees have average or high level of mass media exposure, whereas non-trainees have low level of mass media exposure.

18. Trainees have higher socio-economic status than the non-trainees.

19. Trainees have more knowledge about the KVK training programme than the non-trainees.

20. Trainees have greater knowledge than the non-trainees about paddy crop.

21. Trainees have greater knowledge about wheat technology than the non-trainees.

22. Trainees have greater knowledge than the non-trainees about tomato crop technology.

23. Trainees have greater knowledge than the non-trainees about brinjal crop farming.

24. Trainees have more knowledge than the non-trainees about kitchen gardening technology.

25. Trainees have greater knowledge about fish farming than the non-trainees.

26. Trainees have more favorable attitude towards KVK training programme than the non-trainees.

27. Trainee farmers of paddy have higher level of adoption and also higher mean score as compared to the non-trainee farmers.

28. Trainee farmers of wheat have higher level of adoption of recommended package of practices than the non-trainees.

29. Trainees of tomato growers have higher level of adoption of recommended technology than the non-trainees.
30. Trainees of brinjal growers have higher level of adoption of recommended technology than the non-trainees.

31. Trainees of kitchen gardening have higher level of adoption of recommended package of practices than the non-trainees.

32. Trainees of fisheries have higher level of adoption of recommended technology than the non-trainees.

33. The significant, values are indicative of the fact that there is impact of one factor on the other i.e. informal source of extension contact in case of trainee group while herd i.e. and formal source of extension contact in case of non-trainee group, respectively; on extent of adoption of improved agricultural technology in case of paddy adopters.

34. There is not even a single value, which is significant, while in case of non-trainee group there is one value, which is significant and this is in case of testing association between caste and extent of adoption. This indicates that caste is playing a vital role in adoption of improved agricultural technology in case of non-trainees group; on extent of adoption of improved agricultural technology in case of wheat adopters.

35. There is not even a single value, which is significant in case of trainee group while in case of non-trainee group there is one value which is significant in case of testing association between formal source of extension contact and extent of adoption. This indicates that informal source of extension contact is playing a vital role in adoption of improved agricultural technology in case of non-trainee group; on extent of adoption of improved agricultural technology in case of tomato growers.

36. There is not even a single value, which is significant in case of trainee group while in case of non-trainee group there is one value, which is significant and this is in case of testing association between knowledge about brinjal crop and extent of adoption. This indicates that knowledge is playing a vital role in adoption of improved agricultural technology in case of non-trainee group; on extent of adoption of improved agricultural technology; in case of brinjal growers.
37. There is not even a single value which is significant in case of trainee group while in case of non-trainee group, there are two values, which are significant and these are in case of testing association between age, education Vs extent of adoption. This indicates that age and education are playing a vital role in adoption of improved agricultural technology in case of non-trainee group; on extent of adoption of improved agricultural technology; in case of kitchen garden adopters.

38. In case of trainee and non-trainee group there is not even a single value, which is significant at 5 per cent level of significance, in testing association between various physic-cum-socio-economic characteristics and extent of adoption. This indicates that there is no association between various physic-cum-socio-economic characteristics and extent of adoption of improved agricultural technology in case of fisheries adopters.

Insignificant value in majority of cases are mainly due to concentration of respondents only towards the higher side in case of trainee group, while only towards that lower side in case of non-trainee group. This indicates that adopters in case of trainee group are already at saturation point i.e. they are much advanced in respect of various psycho-cum-socio-economic characteristics resulting to such a low responsive values, while contrary to trainee group, the adopters in case of non-trainee group are still lagging much behind in attaining the desired level of these characteristics.

39. Most important constraint felt by the trainees is the low prices of the high value crops during the peak period, ranking 1st; the poor risk bearing capacity of the farmers, ranking IIrd; high cost of improved technology, ranking IIIrd. Whereas in case of non-trainees, poor knowledge regarding plant protection measures and control of weed technology ranked 1st, poor knowledge regarding high yielding varieties and poor knowledge regarding use of farm implements technology ranked IIrd and IIIrd, respectively.

40. Majority of trainers facing the constraint, no incentives for extra work and holiday work ranked 1st. village panchayat do not cooperate in organizing training programme and it is difficult to provide inputs immediately or after training programmes ranked IInd, trainees are not ready to come for on-campus training and inadequate facilities for practical training, ranked IIIrd.
IMPLICATIONS:

The study will have a definite bearing on future development of agriculture as a whole. It attempts to different categories of trainees involvement under Krishi Vigyan Kendra. The study will help in identifying the factors which make for differences in involvement level of different categories of trainees participating in the Krishi Vigyan Kendra. This study is important from the point of view of the organization, because of the need of achieving greater productivity of its agricultural scientists as well as the necessity. Above all, the findings of the study could be of great value to the management authority in shaping the training programmes to achieve the organizational goals more efficiently. The present study besides of having direct utility to the Krishi Vigyan Kendra under the investigation, will help the Krishi Vigyan Kendra administration of similar nature in redesigning the trainees management policy. The research approach may be of value of the future research as in this or similar areas.

The findings of study will provide useful information for the planners, organizers and N.G.O’s chairman of the KVK. The assessment of impact and analysis of training programme as perceived by the trained farmers and trainers may give the whole scenario of planning, organizing and conducting the training programme for the training organizer and trainers of KVK.

The results of the present study would be useful for other KVKs working in U.P. and India for improving their training performance. Finally, the study will have for reaching implication for trainers, planners, policy makers and for further development of agriculture.
RECOMMENDATIONS:

The findings of the present study, a few recommendations inevitably seem to be important to help the KVKs to achieve desired success. The recommendations made are focused on the following dimensions:

1. Wide publicity should be given before starting the KVKs training programme. It is desirable to consider ex-trainees as motivated group organizers who should be properly trained to do the job of motivating others to join future functioning of KVKs and its adoption of agricultural Technology.

2. The syllabus for the training programme should be developed after ascertaining the training needs and job responsibilities of the trainees taking into consideration the existing situation and local resources.

3. The level of education of farmers has been not of very high level. This should be kept in mind while designing training programme for them in the KVKs.

4. The farmers can not adopt all the crop improvements suggested during training at KVKs because of obvious economic limitations. They need to be helped by KVKs to get credit facilities.

5. The designer of training should keep this in mind that farmers coming for training do not have large farms. Technologies, which are suitable for marginal and small farmers only, need to be suggested in the KVKs training.

6. More emphasis should be given on practical, instead of lectures and opportunity to practice should be provided to farmers. This shall result in better retention and adoption of technologies.

7. Provision should also be make for tea, refreshment etc, in off campus training programmes. The will attract more farmers, as they will feel felicitated over these.

8. Farm operations at the demonstration site should be so planned so as to give the opportunity to the trainees for practical work. Farmers tend to retain knowledge learnt by self-experience.

9. It seems information seeking behavior of farmers through mass media is improving with each passing day. They are reasonably aware of the current happening in the country and in local areas around them. Research has repeatedly shown that exposure to mass media is the first step to make a person modern and updated. In other words the simple farmers are already on the way to modernization. As such opportunities should be created to bring them closer to mass media.
10. The audio-visual aids should be utilized for instructions. This will help to teach more easily and effectively. Trainers should be given facilities for preparation of audio-visual aids.

11. The emphasis should be given to printed material because most of them can read, followed by group discussion method for imparting knowledge to literate farmers. Printed materials can be kept by farmers for future use also.

12. The relevant literature on the subject i.e. latest technology, should be made available before training. If possible stationery should also be provided free to the trainees.

13. Trainees should be provided library facilities for self-study either in the KVKs or in the hostel. All KVKs should have good hostel facilities.

14. There is a great dearth of reading materials in local language for trainees. Efforts should be made to create such materials, which will strengthen the training.

15. Present duration of training programme appears to be sufficient and no change is required.

16. The appropriate time of training suggested by the farmers has been April to May and August to October. This should be kept in mind while developing a training programme for the adoption of farm technologies.

17. In order to achieve stability in production, encouraging farmers by providing them with the necessary credit facilities is a must for adoption of latest technologies.

18. For teaching, only professionally trained persons should be appointed in KVKs. Persons from rural background should be preferred. Trainers should be regularly sent on refresher training programmes.

19. Trainers should involve themselves intensively in practical classes by demonstrating the work with their own hands. This will further enhance their knowledge and retention.

20. Newly recruited staff should be given proper orientation and training about KVKs programme, its objectives, methodology of working with rural poor, appropriate technologies, programme planning and implementation and how to get people’s participation.

21. A strong functional linkage with various development agencies, voluntary organization and research institutes should be made to facilitate the training process and its impact by other KVKs.
22. Transport allowances should be provided to the trainees for on-campus training programme and other functioning of KVKs.

23. Critical inputs should be provided after completion of training at subsidized rate for the adoption of new agricultural Technology.

24. Provisions should be made for funds or inputs to the farmers for adoption of new farm technology.

25. Recent varieties of different crop should be made available through seed-sale counter on no profit/loss basis.

26. Mini bus should be provided to each KVK by ICAR for transportation of trainees and hostel facilities for trainees should be available at each KVK for the participate of trainees on the adoption of new agricultural Technology.

27. Performance appraisal of each staff should be necessary and Training Organizer should be authorised for it.

28. Demonstration unit should be established by each discipline for practical training. Inputs/ funds should be provided by ICAR.
SUGGESTIONS FOR FUTURE RESEARCH:

On the basis of the present study recommend the following measures for future research b and planning there of for the regional development in particular and overall development in general:

1. The present study is confined to determine the impact of training programme on knowledge, attitude, adoption and socio-economic status of the trainees. Another study may be formulated in order to adoption of new agricultural Technology followed by the KVKs.

2. Further researches should devote more attention on case study of ex-trainees of KVKs, since empirical methods may reveal more mathematical results rather than going in depth into factual live figures.

3. Since the study has been conducted to assess the impact of training of a single KVK; there is need to study this in a fairly large number of randomly selected KVKs to generalize the findings of the study.

4. A comparative study of functioning and impact of KVKs under ICAR, Agricultural Universities and Voluntary Organisations should also be undertaken to understand the trend and strategy of different administrative set up.

5. It is the quality of the trainers, which largely determines the effectiveness of the training programme. Hence, the profile of the trainers should also be studied.

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