Chapter–8

The Gender Impact and Analysis: The Empirical Study

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8.1 Impact and impact on women

What is an impact?

Concept of impact: Basically impact is the reportable quantifiable difference, in potential difference that a project or programme is making real people's lives.

It reports pay OHS and benefits to society. The focus is on public not internal or personal benefit.

Key areas of Impact

- Economics
- Environmental
- Social
- Health & well being concept of impact.

An impact statement is a brief summary.

- High lights the differences a programme is making for the public good.
- Consciously summarizes what you did to achieve this different.
- Clearly states pay offs to society impact study is both an evaluation and monetarism process as to access the level and character of the effect generated by the functioning of any project on the stake holders. The stake holders can be primary, secondary & tertiary by nature.

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The impact of KVK on farm women is very difficult to assess. The farm women can not be kept insulated of family and out side impact, Neither they can be treated as a central group against an experimental one like the men, farm women are constantly on interaction under impact with & of different agricultural organization like state agricultural department, NGO, Fertilizer dealers, Non adopted neighboring farmers and so many besides they have been constrained social as mosaics between adopted and non-adopted farmers. There is no such metallic barrier between adopted and non adopted farmers under the same KVK to restrict the spillover effect.

Forever it is expected that the adopted farmers of KVK by deemed of her structured introduction and scheduled action of expected to have better training well designed capacity building, higher resource fullness, grated exposure to the media, Higher level of technical information inventory over the non-adopted once.

Impact

An impact is the perceived effect. The perception of a effect varies from person to person, season to season and technology to technology. The perception is the psycho-motor disposition of a learning experiences.

The Impact of KVK on farm women has been a collective contribution from its functional output and social outcome. The Long term impacts are basically the social outcome. That is why the impact of KVK has been measured in terms of its perceived efficacy of the training, changes in income the perceived constraints and lastly the sustainable social development.

Every effect has got on output which is basically physical by nature. Every out is expected to generate a long term impact, which is perceived as social-outcome. So, output to out-come is a complex social transformation and it ultimately would impact on both the structure and function of social ecology (Ashey S, & Poudhk 2002).

The following model would better configure the theoretical frame work or paradigm the present study.

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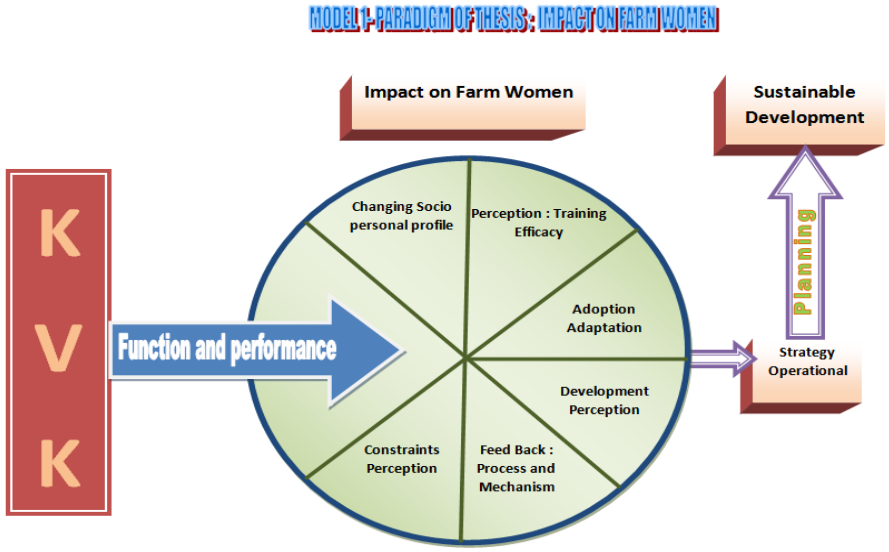
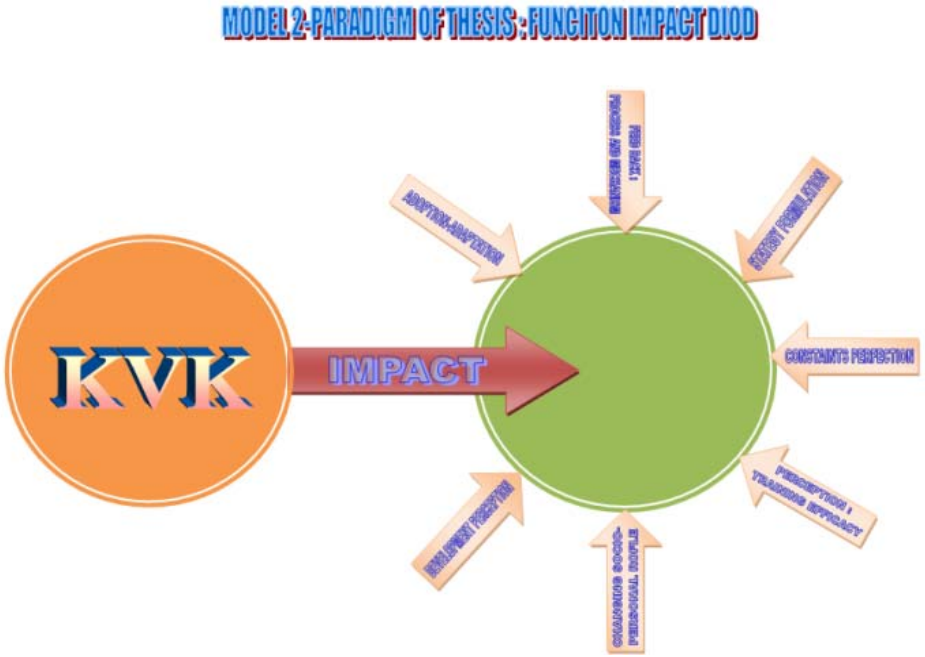
Paradigm–I The KVK is generating impacts in the arm of perception changing socio-personal profile.



Paradigm-II KVK: Function And Performance



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The paradigm suggests that every KVK function shall generate reciprocal impact, as stated earlier and the impacts together go on generating a strategy for planning and ultimate, these KVK planning would generate a sustainable development where in farmwomen shall be the most important social stakeholder.

8.2 SOCIO–ECONOMIC VARIABLES: Measured in terms of composite digital valued.

SL No	Variables	Scales used for Their Measurement
1	AGE (X1)	Developed
2	EDUCATION (X2)	Bawajir and Nandaparkash
3	OCCUPATION (X3)	Bawajir and Nandaparkash
4	FAMILY SIZE (X4)	Bawajir and Nandaparkash
5	HOLDING SIZE (X5)	Bawajir and Nandaparkash
6	HOUSE STATUS (X6)	Bawajir and Nandaparkash
7	MATERIAL POSSESSION (X7)	Developed

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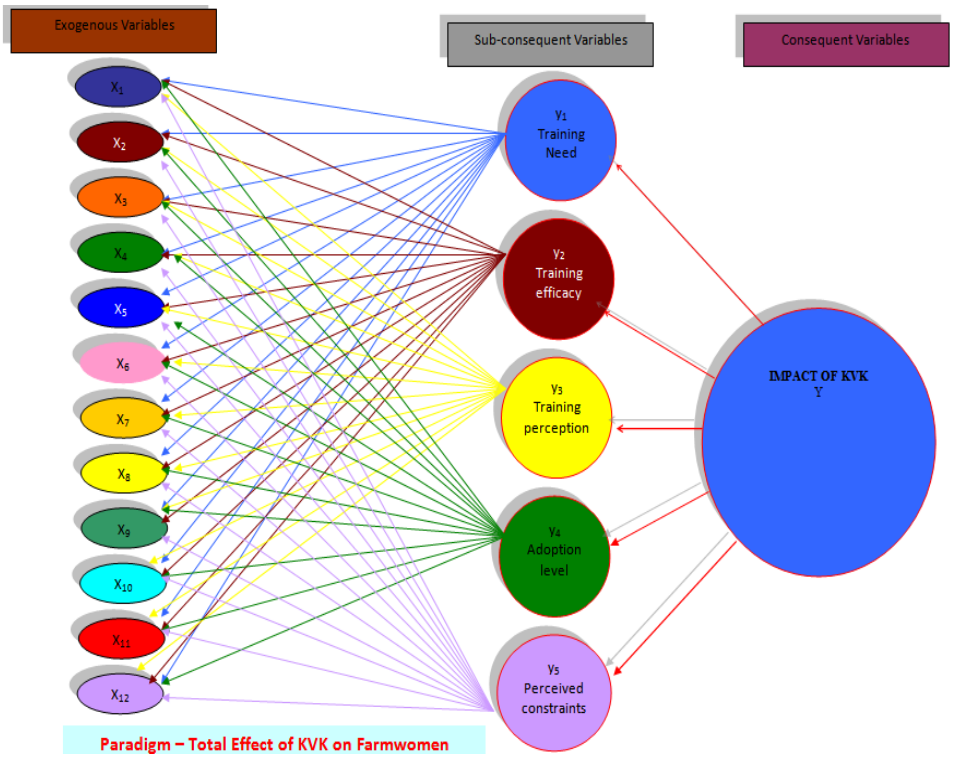
8	INCOME (X8)	Developed
9	FARM POWER (X9)	Developed
10	SOCIAL PATICIPATION (X10)	Developed
11	SCIENTIFIC ASPIRATION (X11)	Developed
12	MEDIA EXPOSURE (X12)	Developed

Table 4.3: ACCESS VARIABLES: Sub component of KVK performance (y_1, y_2, y_3, y_4 and y_5)

SL NO	VARIABLES	SCALES USED FOR THEIR MEASUREMENTS
1	KVK PERFORMANCE IN ADOPTED VILLAGE (Y1)	Developed
2	KVK PERFORMANCE IN NON-ADOPTED VILLAGE(Y2)	Developed
3	PERFORMANCE (POOLED) IN ADOPTED AND NON-ADOPTED(Y)	Developed
4	PRECEIVED TRAINING NEEDS(y1)	Developed
5	PERCEIVED TRAINING EFFICACY(y 2)	Developed
6	TRAINING PERCEPTION(y 3)	Developed
7	ADOPTION LEVEL(y 4)	Developed
8	PERCEIVED TRAINING CONSTRAINTS(y 5)	Developed



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The present research entitled “IMPACT OF KRISHI VIGAN KENDRA ON FARM WOMEN” was undertaken in 10 districts of Odisha. A total number of 300 farm women were selected from the KVK of their respective districts. The researcher opted for one adopted and one non- adopted village from each KVK.15 respondents were selected from each (adopted and non–adopted) village were interviewed personally by the researcher to find out the impact of KVK training on farm women with respect to Objective:

1. To study the Socio-personal profile of woman trained at KVK during last 5 years.
2. To examine the training programme of KVK for farm women in relation to content methods of training venue and preference of trainees and training need assessment.
3. To find out the extent of adoption of technologies for different subject matter by the trainees as a result of training impacted through K.V.K.
4. To study the feed-back mechanism used by the K.V.K to ascertain impact in the field of trained farm women.
5. To determine the perception of women trainees and non trainees about the programme of K.V.K for women in relation to training programme, content, venue, duration, use of training method and motivation to put learning into action.
6. To find out and analyze the constraints in the training programme as well as adoption of the technology by the women imparted in the training.
7. To suggest the improvement on the basis of the finding for socio economic development of farm women.

8.3 DISTRIBUTION OF FARM WOMEN IN ADOPTED AND NON - ADOPTED VILLAGES INTERMS OF SOCIO-ECONOMICS VARIABLES

The mean age of the farmwomen in adopted villages has been found less than the non-adopted village.

The mean value of education of the farmwomen has been less in non-adopted villages than in adopted villages the co-efficient of variance for education has been comparatively less in adopted villages.

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The mean score of occupation although has been found at higher scale in non-adopted villages than in adopted village.

The average sole of family has been more or less same for in farmwomen in both the adopted and non-adopted villages.

The farmwomen of non-adopted villages have marginally less land than that of the adopted villages. In both the villages, the distribution of land holding has been fond fairly consistent.

The house status in both the categories of villages shows no such perceptible difference. The mean values are having around 3.4.

The material possession, on an average, has been found less in non-adopted villages.

The mean income score for the farmwomen in non-adopted villages has been found higher than that of the adopted village.

The farmwomen in non adopted villages have less of farm power stats.

Social participation, as reflected through mean value, has been higher for the respondents in non-adopted villages.

The mean value of scientific aspiration has been found less in non-adopted villages than in the adopted villages. However the difference is marginal.

The respondents of non-adopted villages have shown higher dent of media exposure than that of the women from adopted villages.

8.3.1 DISTRIBUTION OF FARM WOMEN IN TERMS OF PERCEIVED TRAINING NEED (y_1) (ADOPTED AND NON-ADOPTED VILLAGES)

Table ii (a) and ii (b) present the farm women of non-adopted villages record relatively small mean values of in the following component characters viz. crop production, Horticulture, plant protection, Agril. Engineering, Animal husbandry, Fishery and Home science.

8.3.2 ADOPTED VILLAGE PERCEIVED TRAINING NEED (y_1) and 12 EXOGENOUS VARIABLES

The variable Age (x_1) Social participation (x_{10}) Scientific Aspiration (x_{11}) and Media exposure (x_{12}) have exerted district direct effect on the perception of training need in adopted villages.

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Social participation (x_{10}) has exerted the highest indirect effect on the perception of training need to imply its tremendous associational viscosity for imbibing the effect of other variable.

The variable House status (x_6) has routed the highest indirect effect on as many as three variables to characterise the perception of training needs in the adopted village.

8.3.3 NON-ADOPTED VILLAGES PERCEIVED TRAINING NEED (y_1) AND 12 EXOGENOUS VARIABLES

The variables, Age (x_1), Education (x_2) Family size (x_4), House status (x_6),income (x_8) have wielded discernible direct effect to steer the performance of the consequent variable.

The value of coefficient of correlation predicts that respondents of younger age have better impact on the training need perception. Higher family size and higher income both have generated telling impact, simply because, in a high size family, need for training is perceived clearly because it needs to increase the productivity of crops immediately.

The variables Age (x_1), Education (x_2), Family size (x_4), House status (x_6), Income (x_8) have generated higher indirect impact to justify their inevitable and intense associational property in characterizing the performance of the predicted character, The perceived training need.

The variable Income (x_8) has routed the highest indirect effect of as many as 7 variables to impact on the behavior of the consequent variable, perceived training need (y_1), in non-adopted villages.

8.3.4 KVK IMPACT: PERCEPTION OF TRAINING NEED (y_1): COMPARISON BETWEEN ADOPTED AND NON ADOPTED VILLAGES

It has been found that the adopted and non-adopted villages distinctly, differ, while the comparison is based on perceived training need, components of crop-production, Horticulture, plant protection Agril. Engineering, Fishery, Extension Education.

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8.3.5 RANK ORDER CORRELATION: ADOPTED AND NON-ADOPTED VILLAGES: COMPONENTS OF PERCEIVED TRAINING NEED AND 12 PREDICTOR CHARACTERS.

It has been found that the predictor variable age has been significantly correlated with the subcomponents (Training Need): Crop production, Horticulture, Plant protection, Fishery, Extension Education and perceived training need score.

Education has been found to be correlated with forestry components. occupation has been tuned to age.

Farm size has recorded no such significant correlation with any other component. So training need has become a universal perception below the farm size category per cent.

Holding size has been significant for associating a training need in Horticulture and Animal husbandry.

The House status has been predominately tuned to plant protection, Agril. Engineering, Forestry and Training need score.

The Material possession has been significantly tuned Horticulture. Income has come significantly attuned to plant protection and Agril. Engineering to imply that an optimum income support is essential to elicit the need for training in these two areas.

Scientific aspiration has well been tuned to crop production and Horticulture in terms of eliciting the training need.

Media exposure has gone significantly attuned to all the sub components excepting crop production and Home science.

8.3.6 REGRESSION COEFFICIENT: PERCEPTION OF TRAINING NEED (y_1) ON THE CAUSAL VARIABLES

The regression co-efficient and has depicted that the variables Farm size and Income have exerted significant impact on the perception of training need in both adopted and non-adopted village.

Farm size and income behave as binary impulse of resource-diode to characterize the perception of training need and subsequently goes on

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operationally impacting on the generation of training need from amongst the farmwomen.

8.3.7 CANONICAL DISCRIMINANT FUNCTION: UNSTANDARDIZED COEFFICIENTS

The canonical discriminant Function (CDF) to imply that the variables, Social participation, Media exposure and Horticulture are selectively impacting on for generating better perception of training need in adopted villages.

In non-adopted villages not a single variable does build up a strategic relation for generating training new part.

8.4 DISTRIBUTION OF FARMWOMEN IN TERMS OF PERCEIVED TRAINING EFFICACY (y_2) (ADOPTED AND NON-ADOPTED VILLAGES)

Table iii (a) and iii (b) presents all the variables in both adopted and non-adopted villages record a consistent distribution across the respondents.

8.4.1 PERCEIVED TRAINING EFFICACY (y_2) AND 12 EXOGENOUS VARIABLES

The total direct effect, Scientific Aspiration (x_{11}), through a logical interaction, has wielded a positive impact on the perception of training efficacy. Only a mind with pursuits of sciencetism could imbibe and assimilates the positive impact of training in getting a farming system transformed in a desired way.

The other variable, social participation (x_{10}), has recorded the highest indirect effect on perception of training efficacy to expose the congenital impact of social participation on the perception of training efficacy to creating a companionship with other variables.

The variables Scientific Aspiration (x_{11}) has routed the highest indirect effect of as many as six variables to finally characterise the behaviour of the sub consequent variable, perceived training efficacy.

8.4.2 PERCEIVED TRAINING EFFICACY (y_2) AND 12 EXOGENOUS VARIABLES.

It has been found that the variable Holding size (x_5), Income (x_8) have wielded substantial total effect on the perception of training efficacy.

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From the above stated relationship it can be concluded that Farm women having a back ground of larger holding size can derive a better perception on the training efficacy because of their wider access to training institutes or on going training programme happening in and around places. The variable holding size (x_5) has also generated the highest direct effect on the perception of training efficacy.

The variable farm power (x_9) has routed the highest indirect effect on the perception of training efficacy.

The 3 variables viz. Age (x_1) Holding size (x_5) and Farm power (x_9) variables have routed the highest indirect effect of three variables each towards characterizing the behaviour and performance of the consequent variable perceived training efficacy.

8.4.3 MANN-WHITNEY TEST: PERCEIVED TRAINING EFFICACY (y_2) IMPACT OF KVK ON BOTH ADOPTED AND NON-ADOPTED VILLAGES:

It has been found that both the adopted and non- adopted villages differ significantly between them in terms of the following predictor variables (having significant levels less than 0.05) Age, occupation, Holding Size, Material possession, Farm power, social participation, Media Exposures.

The two set of villages, adopted and non-adopted villages do differ in terms of components of training efficacy too. These are content, Venue, Duration, Method, area and training impact score.

8.4.4 RANK ORDER CORRELATION: ADOPTED AND NON-ADOPTED VILLAGES: COMPONENTS OF PERCEIVED TRAINING EFFICACY (y_2) AND 12 PREDICTOR CHARACTERS.

It has been found that the age(X_1) has established a significant Co-rrelation between venue, and perceived Training Efficacy.

Education(X_2) has recorded the significant rank order correlation with method of training and training efficacy score.

Holding size has recorded significance correlation with the component variables, venue and training efficacy Scores. So also, the House status has recorded significant correlation with the Venue, Duration and Training efficacy. Income has established strong relation along the ranks with the

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variables, Content venue, Duration and Training efficacy. Farm power has recorded significant correlation with component variable Method, Scientificaspiration has been tuned to the component variables, content, venue,method and training efficacy score.

Media exposure has gone significantly correlated with the component variables venue, Duration area.

8.4.5 REGRESSION ANALYSIS: ISOLATING CRITICAL VARIABLES

It has been found that the variables Age, Farm power, Scientific Aspiration and Media Exposure have recorded significant regressional impact on the perceived training efficacy.

8.4.6 CANONICAL DISCRIMANT FUNCTION (CDF): TUNING OF RIGHT SIDE AND LEFT SIDE VARIABLES:

The results suggest that the variables occupation and Media Exposure have gone proactive in adopted villages, while the variable Farm power has met the non-adopted villages unique in perceiving the Training Efficacy. So to generate a better perception on training efficacy in adopted villages, **Occupation and Media exposure** of the respondents need to be scrutinized properly and poor level of farm Mechanisation still remains an important consideration for upgradation of the training efficacy and its perception as well.

8.4.7 DISTRIBUTION OF FARMWOMEN IN TERMS OF TRAINING PERCEPTION (y_3) (ADOPTED AND NON-ADOPTED VILLAGES)

The Table iv (a) and iv (b) present all the characters in both the adopted and non-adopted villages here have shown fairly high consistency in their distribution across the respondents.

8.4.8 TRAINING PERCEPTION (y_3) AND 12 EXOGENOUS VARIABLES

The variables, Education (x_2) Family size (x_4) and Farm power (x_9), have recorded comprehensive and direct impact on training perception. Family size generates a better urge for undergoing training programme.

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So far as the indirect effect is in concern, Age (x_1) has generated the highest associational property to characterise the behavior of the training perception.

The variable farm power (x_9) has routed the highest indirect effect of as many as six variables, to characterise the performance of training perception.

8.4.9 TRAINING PERCEPTION (y_3) AND 12 EXOGENOUS VARIABLES

The variables, scientific aspiration, Media exposure, Education, Family size, Holding size Material possession, Farm power, Scientific Aspiration and Media exposure have wielded the substantial direct effect on the variable Scientific Aspiration (x_{11}) has routed the highest indirect effect of as many as 5 variables to characterise the beheviour of the consequent variable, Training Perception.

8.4.10 MANN-WHITNEY TEST: TRAINING PERCEPTION (y_3): IMPACT OF KVK ON BOTH ADOPTED AND NON ADOPTED VILLAGES

It has been found that the two category of villages, adopted and non adopted villages, based on significant differences in terms of content, venue and in training perception score, while a KVK envisages to make a rapid progress in the adopted villages, the villages strategically selected and the non-adopted villages, the recipient of spill over effect of KVK vis-à-vis adopted villages, These indicator factors /predictors need to be considered.

8.4.11 RANK ORDER CORRELATION: ADOPTED AND NON-ADOPTED VILLAGES: COMPONENTS OF TRAINING PERCEPTION (y_3) AND 12 PREDICTOR CHARACTERS.

It is depicted that in both the category of village, the component management is correlated with the Age and House status of the respondents.

The content of the Training is well tuned with the Scientific aspiration of the Farmwomen, the respondents. The training component, venue Is not that important a perception. The method of training is correlation with the Education of the respondents while the subject area and the content of training have been closely tuned to Scientific aspiration. However, Media

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exposure could not make any take with any of the component of training participation, in other way; the role of media has been universal for any training component.

8.4.12 REGRESSION ANALYSIS: ISOLATING CRITICAL VARIABLES

The value stand at 0.427, it is to conclude that 42.70 percent of the variance embedded with the consequent factor training perception has been interpreted so far.

8.4.13 CANONICAL DISCRIMINANT FUNCTION UNSTANDARDIZED COEFFICIENTS:

It has been found that, in making a difference between adopted and non adopted village, The role of occupation, farm power, media exposure, training content , training venue, subject area of training have been dominant. While the factor, Occupation (0.136), media expose (1.681), Training content (0.950), training venue (1.820) have been unique with adopted villages the other factors farm power (-0.286) training Area (-1.156) have gone precisely attuned to the respondents of non-adopted village.

8.5.1 DISTRIBUTION OF FARMWOMEN IN TERMS OF ADOPTION LEVEL (y_4) (ADOPTED AND NON-ADOPTED VILLAGES)

Table v (a) presents a comparative vision of both the distribution depicts that the farm women of Non-adopted villages have less mean varies of education family size, material possession, farm power, social aspiration and training need on home science. Now it is to elucidate that whether there has been any contribution of KVK performance on these factors in the adopted villages.

8.5.2 ADOPTION LEVEL (y_4) AND 12 EXOGENOUS VARIABLES

The variable media exposure(X_{12}) has also wielded the highest indirect effect on the Adoption level to indicate its undesirable impact in the socialisation of technology.

The variable, farm power (x_9), has routed the highest indirect effect of as many as five variables to characterize the behavioral disposition of the

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consequent variable, Adoption level. Farm power here from this study could be perceived as an indicator variable to asses both the performance and impact of KVK, here in this case, for the Adopted villages under the aegis of KVK.

8.5.3 ADOPTION LEVEL (y_4) AND 12 EXOGENOUS VARIABLES

So far as the total direct effect is in concern, the variables farm power, social participation, scientific aspiration and Media exposure have occupied the predominant position.

The variables Age, Education, Family size, Holding size, Material possession, Farm power Media exposures have recorded substantial in direct effect to characterise the process of adoption of different technologies in a village, not adopted by the KVK.

The variable, Education (x_2) has routed the highest indirect effect of as many as four variables to ultimately impact on the adoption level. Education begets pursuits of knowledge and dynamic of motivation for accepting and socializing technology as well as innovation.

8.5.4 MANN-WHITNEY TEST: ADOTOPTION LEVEL (y_4): IMPACT OF THE KVK ON BOTH ADOPTED AND NON-ADOPTED VILLAGES

It has been evinced that the adopted and Non-adopted villages show a difference between themselves in terms of adoption level with special reference to the variables crop production, Horticulture, plant protection Fishery, Forestry, Extension Education and Home science.

8.5.5 RANK ORDER CORRELATION: ADOPTED AND NON-ADOPTED VILLAGES: COMPONENTS OF ADOPTION LEVEL (y_4) AND 12 PREDICTOR CHARACTERS

It is evinced that the component of adoption in crop production has been correlated to Holding size, House status, Material possession, Social participation, scientific aspiration and media exposure.

The other component plant protection has been found to be associated with age, while the component Agri. Engineering has been closely tuned to Holding Size and House status.

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It is interesting to note that optimum farm size is requirement to go for farm mechanization or to harvest benefit from it , Social participation and Scientific Aspiration have also be associated with Argil. Engineering component.

The adoption level in Argil. Engineering component has been anatomically attuned to the relationships with social participation and Scientific aspiration too.

The component, Adoption level of Animal husbandry , has been tuned to Holding size, House status, Social participation and Scientific Aspiration. For animal husbandry enterprise, a potential farmwomen adopted also needs to be supported by optimum farm size.

For fish enterprise, the Age, Farm power and Media exposures have become important consideration, while for forestry, Media exposures has put up a strong rank order correlation to intimately influence the adoption level.

In forestry component and Media exposure have attuned itself to ultimately decide on the adoption level, Home science has been found to establish correlation with Family size, social participation and Scientific Aspiration.

The level of adoption ultimately has attuned itself, through the rank order correlation to Holding size, House status, Social participation and scientific aspiration's. To foster better adoption with higher application of useful technologies, one needs to have optimum Holding , size wider social participation and a desirable Scientific Aspiration as well , irrespective of adopted and Non-adopted village category.

8.5.6 REGRESSION CO-EFFICIENT: ISOLATING CRITICAL VARIABLES

It has been found that the following variables are having significant efficacy for causing higher adoption level or occupation , family size, Farm power, social participation and scientific Aspiration.

8.5.7 CANONICAL DISCRIMINANT FUNCTION UNSTANDARDIZED COEFFICIENTS

The variables Social participation, Media exposure, Plant protection, Fishery and Extension Education have precisely been tuned to adoption level of farm women be considered for upgrading level of adoption.

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8.6.1 DISTRIBUTION OF FARMWOMEN INTERMS OF PERCEIVED TRAINING CONSTRAINTS (y_5) (ADOPTED AND NON-ADOPTED VILLAGES)

Table vi (a) and vi (b) presents the farm women of non-adopted villages have run less in mean values of perceived constraints of management and technology. This apparent different indicates that in non-adopted villages, there is scope to improve management level, which, may interm, paves the why for technology socialization in a wider manner.

8.6.2 PERCEIVED TRAINING CONSTRAINT (y_5) AND 12 EXOGENOUS VARIABLES

The variable media exposure (x_{12}), has routed the highest indirect effect of as many as five exogenous variables to impact on the perception on training constraints. Media exposure has so far been both technical and social symbiosis to be associated with other factors by creating an operational synergy with other variables.

8.6.3 PERCEIVED TRAINING CONSTRAINTS (y_5) AND 12 EXOGENOUS VARIABLES

The variables, Education, Holding size, Income, Farm power, Scientific Aspiration have exerted the substaintive direct effect on the perceived training constraints.

The variable, Media exposure, has routed the highest indirect effect in characterising the behaviour of perceived training constraints.

It is to take note that the variable, Family size (x_4) has routed the highest indirect effect of as many as four variables to quantify and qualify the behaviour of the perceived constraints of training.

8.6.4 MANN-WHITNEY TEST: PERCEIVED TRAINING CONSTRAINTS (y_5): IMPACT OF KVK ON BOTH ADOPTED AND NON-ADOPTED VILLAGES

It is evinced that these is clear difference between adopted and non-adopted villages in perceiving the economic constraints that ultimately keeps influencing perceived impact of KVK Training.

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Many a time , economic constraints, stands derelict between proposal and progress, emotion and reality, dream and destiny.

8.6.5 RANK ORDER CORRELATION: PERCEIVED TRAINING CONSTRIANTS (y_5) AND COMPONENT VARIABLES:

It has been found that Management constraints get associated with Scientific Aspiration, while technological constraints have been hooked up by variables Farm power, Social participation and Scientific Aspiration.

Economic constraints have been hooked by occupation to imply that occupation of Farmwomen help perceive the economic constraint in a unique way, may be with much of empiricism.

Holding size and Media exposure have recorded significant rank order correlation with socio- psychological constraints. The institutional constraints are tuned to education and scientific aspiration, while the pooled constraint score has recorded the significant correlation with media exposure.

8.6.6 REGRESSION CO-EFFICIENT: ISOLATING CRITICAL VARIABLES

The Stepwise Regression co-efficient to screen of the following variable/causal factor impacting the Adoption Level of farm women viz. Education , Holding Size, Income, Farm Power, Scientific Aspiration and Media Exposure. So, these factors need to be strategically emphasized and dealt with for scaling up adaptation level of farm women in transforming a technologically less socialized village into a technically advanced one. It also depicts that the combination of these six causal factors 37.1 per cent of variance embedded with consequent factors has so far been explained.

8.6.7 CANONICAL DISCRIMINANT FUNCTION: UNSTANDARDIZED COEFFICIENTS:

The variables viz: occupation, Media exposure , Management constraint , Economic constraints and Farm power have contributed to create a significant difference between adopted and Non-adopted villages.

While the variables occupation, Media exposure, Management constraints have, precisely effective in adopted village, the other two variables Farm power, Economic constraints have been operational in non- adopted village.

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So, in Ashering better perception on constraints in adopted villages occupation, Media exposure and management factors need to be highlighted. The non-adopted villages have been unique by presenting a need for faster Farm mechanization and elimination of economic constraints for creating better impact of KVK.

8.7 A TOTAL EFFECT OF EXOGENOUS VARIABLE ON KVK IMPACT (Y_1) : KVK ADOPTED VILLAGES

It has been found that the variables, Age(X_1). Housing status(X_6), Farm power(X_9) Social participation (X_{10}), Scientific aspiration (X_{11}), Media exposure(X_{12}) have recorded the significant total effect (r) on the impact of KVK performance.

It has been found that the variables, House status (X_6), Farm power(X_9), Scientific aspiration (X_{11}), Media expose(X_{12}), have recorded substantial direct impact on the performance of KVK in the adopted villages.

The variable Scientific Aspiration(X_{11}), has routed the highest indirect effect of as many as six variables to characterize the KVK impact and thus these variables should be focused with highest priority especially in adopted villages for making KVK performances successful and effective. The residual effect as being 0.487, it is to conclude that 48.70 per cent of the variance in the total impact of KVK (Y) could not be explained.

8.7. B TOTAL EFFECT OF EXOGENOUS VARIABLES ON KVK IMPACT (Y_2) : NON-ADOPTED VILLAGES

It has been found that the variables, Education(X_2) Income(X_7) Scientific Aspiration(X_{11}) have recorded the significant total effect in generating the impact of KVK in Non –adopted villages.

This indicates that in the Non-adopted villages, the Income and Education of the Farmers have become the prime considerations for generating discernible impact on the performance of KVK.

The variable, Farm power (X_9), has generated the highest indirect effect on KVK performance, especially in non adopted villages to evince its associational property to characterize the behavior of other variables in the vistas of generating indirect effect.

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The variable income has routed the highest indirect effect of as many as 5 variables to characterize the effect on the efficacy of KVK performance.

The residual effect being 0.6793, it is to conclude that even with the combination of these 12 exogenous variables, 67.93 percent of variance embedded with KVK impact could not be explained.

8.8. C TOTAL EFFECT OF EXOGENOUS VARIABLES ON KVK IMPACT (Y): ADOPTED AND NON-ADOPTED VILLAGES.

So far as direct effect is in concern, media exposure has wielded the highest value in predicting the impact of KVK. The House status, on the other hand, has generated the highest indirect effect in predicting the impact of KVK. This indicates that House status has retained fair amount of associational property in predicting the KVK impact.

The variable farm power (X9) has routed the highest indirect effect of as many as six exogenous variables to characterise the perception of the KVK impact. Farm power indicates both the need and readiness of technology vis-à-vis input application for transforming farming system from a relatively unproductive one to a deservedly productive one. That is how and why the farm power goes on imbibing the effect of other variables with much of motivational and conceptual viscosity to ultimately characterise the impact of KVK.

8.9 FACTOR ANALYSIS: COMBINING DIFFERENT VARIABLES INTO FACTORS

factor (1) –Socialization Factor

Factor (2)–Perception factor

Factor (3)–Resource factor

Factor (4)–Chronological factor

Factor (5) - Access factor

Factor (6)- Capacity Factor**.**

This factor analysis has been done by following principal component analysis (PCA). Here all the exogenous variables as well as endogenous variables have been synergized to create a constellation of variables; regardless whether they fall to either x or y category.

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8.10 CANONICAL CORRELATION: RELATIONSHIP BETWEEN RIGHT SIDE AND LEFT SIDE VARIABLES.

The right set variables are: perceived training needs (y_1), perceived training efficacy (y_2), Training perception (y_3) Adoption level (y_4) and perceived training constraints (y_5).

The left set variables are consisting of the following explanatory variables viz: age (x_1), Education (x_2), Occupation (x_3) Family size (x_4), Holding size (x_5), House status (x_6), Material possession (x_7), Income (x_8), Farm power (x_9) social participation (x_{10}), scientific aspiration (x_{11}), Media exposure (x_{12}).

Root-I

STRATEGIC IMPLICATION

The research outcome suggests that to increase the training efficacy of the KVK, as perceived by the farm women, the following two characters of the farm women viz: Family size (x_4) and farm power (x_9) status, should be considered. Small family size may help the farmwomen move out of the family out of the domestic chores to receive training better and subsequently generates a better perception on training efficacy.

Root-II

STRATEGIC IMPLICATION

The research out come suggests that to increase the training need, adoption level, and better perception on training constraints, the following character of the farm women, as effective stake holder, should be considered viz: Age (x_1), Education (x_2), Income (x_8), social participation (x_{10}) and Scientific Aspiration (x_{11}) So, a farmwoman stake-holder under the wider canopy of KVK impact should be the farmwomen. of younger age categories, having better education optimum income, social participation and higher scientific aspiration as well.

Root-III

STRATEGIC IMPLICATION

The research out come suggests that only selecting farmwomen having better education, training perception and adoption level of agril. technology

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can be ushered, in every sphere, can also promote better perception on any planned technological change and its subsequent socialization.

Root-IV

STRATEGIC IMPLICATION

The research out come suggests that to uplift the adoption level of the farmwomen through a technology socialization process the women trainees should be selected from young age category, better education, higher holding size better house status having optimum material possession higher farm power and extended social participation.

Root-V

STRATEGIC IMPLICATION

To augment and scale up both the Training efficacy and Adoption level of KVK performances as well as respondents behavioral dispositions, age should earn a clandestine consideration in the selection of the farm women trainees. Both the material position and the income of the family have also exerted a dichotomized impact on training efficacy and Adoption level. Media exposure has also been twinly hooked up by both training efficacy and Adoption level. So, a single social intervention like media exposure can help generate a fillip and a mettle for the farm women in increasing Adoption level and upgrading training efficacy both.

8.11 CONCLUSION

The entire study has been conducted to assess the differential impact of Krishi Vigyan Kendra in two clusters of adopted and non-adopted villages. The “impact” here has been conceived in terms of some predicted variables (Y), relegated to KVK training in terms of adoption of technologies and differential perceptions wielded. There with from both the farm women of adopted and non-adopted village categories on Training Need (y_1), Training Efficacy (y_2), Training perception (y_3), Adoption level (y_4) and training constraints(y_5).

So, the impact of a performing KVK, as conceived through the behavioral disposition of trained and untrained farm women hailing from adopted and

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non-adopted villages, has become a composite and complex consequence to the performance of KVK.

So, the functional perception of Impact (Y) here is a complex function of five sub functions, y_1, y_2, y_3, y_4 and y_5 or $Y = f(y_1 \times y_2 \times y_3 \times y_4 \times y_5)$.

Total Impact (Y) =f [perceived training Need (y_1) x perceived Training Efficacy (y_2) x Training perception (y_3) x Adoption level (y_4) x perceived training constraint (y_5)].

The term 'perception' here is used to imply that impact is both a quantitative and qualitative phenomenon, to be perceived differentially by different personalities.

The empirical study shows that variables education, income, scientific aspiration have recorded substantial effect in the perception of impact of KVK in non-adopted villages. So, the farmwomen in non-adopted villages are reeling around the basic needs of education income and scientific orientation to transform their livelihood through a befitting KVK intervention.

- In Adopted villages, the farmwomen on the other hand, bestowed the variables age, housing status, farm power, social participation, scientific aspiration, media exposure as to be operationally networked with impact of KVK. It is interesting to see the farmwomen of adopted villages may just have crossed the need of basic development parameter like education, income and have generated 'software humane requirements like social participation, scientific aspiration etc. to mobilize themselves to get psycho-socially tuned to KVK performances for characterizing the technology driven development.
- As a whole, the farm women from both adopted and non-adopted villages, have bestowed a common set of variables age, house status, farm power, social participation, scientific aspiration and media exposure exerting effect on characterizing the perception of KVK impact.
- The variables go interacting with each other, sometimes inextricably, explicitly or, implicitly in characterizing the behaviour of predicted variable, as KVK stands here in this study. The twelve exogenous variables have been operationally coagulated in the form of factors. The

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factors are **Socialization Factor, Perception Factor, Resource Factor, Chronological Factor, Access Factor and Capacity Factor.**

So, to generate a desired impact on farmwomen in terms of technology socialization process catered by KVK, it needs to focus on organizing basic socialization process, creating proper perception, providing adequate resource, cataloging age based women trainees making women encapable of accessing institutional advantages and creating capability in farm women for responding to every bit of planned changes.

- The Canonical Discriminant Function (CDF) technique has been applied to strategically isolate and connect some variables from both the left side and right side variables (predicted and predictor) towards canopying an operational epitome of best functioning KVK. With special reference to adopted and non-adopted villages.
- The stepwise regression analysis helps here screen out some few variable from amidst twelve causal variables to generate some strategic implication for ushering desired impact of causal factor on the consequent factor, impact of KVK on farmwomen.
- Different models and paradigms are configured to present lucidly and explicitly different interaction, differential impact and polymorphic networking of set of variables and piece of variables as well. These models further can be replicated to other domains of KVK functioning, institutionalization, socialization and social osmosis as well.

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