Effectiveness of Dairy Based Entrepreneurial Developmental Programmes

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Abstract—In India, problem of unemployment is increasing which may lead to stagnation in job creation. Thus dairy sector can be the source of continuous income and employment generation. Entrepreneurship is important, because it helps to drive the economy. Talking about entrepreneurship among dairy farmers and other business-oriented people, emphasis should be given on systematic awareness and training programmes. ICAR-NDRI has developed considerable expertise over the last five decades in different areas of dairy production; viz, processing, management and production. Keeping in view the above facts the present study was based on two important units of ICAR- NDRI, Karnal i.e. BPD (Business planning and Development unit) and WEL (Women empowerment lab). The present study was designed to analyze the effectiveness of dairy based entrepreneurial developmental programmes among the trainees of both the units; the study entitled as "Effectiveness Of Dairy Based Entrepreneurial Developmental Programmes". 60 respondents were selected randomly, from three trainings each, with total of 120 respondents. Data was collected through semi structured interview schedule. A pre-test was conducted at the time of training and after a gap of one month, post-test was conducted. Non-parametric test-Mann Whitney U test was used for measuring the effectiveness of entrepreneurial developmental programmes. At BPD (56%) were found to be middle age, (93%) had studied up to graduation and above, (36.57%) of the respondents had medium herd size, Most of the respondents (55%) had medium mass media exposure,(50%) belonged to medium category of annual income. For WEL unit, (80%) were found to be young, (40%) of the respondents had educated up to primary level, 40% of the respondents had medium herd size, for annual income,(70%), belonged to low category (<3.08 lacs/annum). According to the Mann Whitney u test, there is a significant difference between the pre- test and post- test mean rank scores for BPD unit. The training is effective for BPD unit as far as entrepreneurial abilities are concerned. For WEL unit, no significant difference was recorded except for achievement motivation. The most important constraints at BPD was the lack of practicals and participative approach. The most important constraint at WEL unit was that the trainees don't get sufficient time, as they are busy with household works. The most important constraint of trainers of BPD was meeting aspirations of candidates from diverse background.

Keywords: ICAR-NDRI, Dairy Entrepreneurship, Effectiveness, Training, BPD(Business Planning and Development Unit)(ICAR-NDRI), WEL(Women Empowerment lab).

1. INTRODUCTION

The importance of dairying in a country like India hardly needs emphasizing. India has vast resources of livestock which play an important role in national economy and also in socio- economic development of millions of rural households. In fact, the Indian dairy sector contributes to the agricultural GDP, to a great extent.

Milk, as a consumption item, has never failed to excite. India is the premier producer as well as largest consumer worldwide; that too, courtesy with small farmers, each having 2-10 heads of cattle as a backyard dairy farming. More significantly this industry grew with practically no subsidy from the Govt. The problem of unemployment has increased at a high rate since last few years, and the problem is projected to witness the marginal increase between 2017 and 2018 which may lead to stagnation in job creation .Unemployment in India is projected to increase from 17.7 million last year to 17.8 million in 2017 and 18 million next year(U.N Report).

Unemployment simply means a situation where person willing to work fails to find a job that earns them living, while major portion of the population is facing the situation, the problem needs a serious heed in case of both the urban and rural youth. Youth has gradually lost interest in pursuing academic degrees and technical expertise in various fields, as they find poor prospects of earning a living. Thus Unemployment has resulted a lot of hardships and a period of agony particularly among youngsters, leading to frustration. Keeping all these points in view, the government of India has launched several schemes to combat the situation. The role of entrepreneurship and entrepreneurial developmental programmes needs a significant mention in reducing poverty and unemployment in India .The Entrepreneurship development programmes helps in motivating the potential entrepreneurs, so that they can solve many of their problems provided proper training is given to them. The important role that entrepreneurship development programmes plays in economic development of nation can

now be put in a more systematic and orderly manner in the following points:-

- Promotes capital formation
- Creates large scale employment opportunities
- Distribution and creation of wealth.
- Promotes balanced regional development.
- Improvement in the standard of loving.
- Induces backward and forward linkage and creates social change which facilitates overall development

It would be worthwhile to mention that...of late, entrepreneurship has become the buzzword of the day. Entrepreneurship is the will to develop, to invest in a business venture with a moderate risk- bearing ability, while breaking the traditional business attitude to get success. It includes acts of organizational creation, renewal or innovation that occur within or outside all existing organization.

Entrepreneurs are defined as individuals or groups of individuals, who act independently or as part of a corporate system who create new organization or who imitate renewal or innovation within an existing organization. As we know that the dairy sector has been gaining huge importance since last few years due to its contribution to the economic development of the nation. Various Dairy based entrepreneurship development programmes has been successfully contributed to the gainful employment. E.g. Dairy entrepreneurship development scheme. When we talk about entrepreneurship among dairy farmers and other business-oriented people, emphasis should be given on systematic awareness and training programmes. Proper awareness about latest technologies, resource availability, and market conditions should be provided to the potential entrepreneurs, and leaders of the respective areas. Entrepreneurship development programmes aims to develop entrepreneurship through motivation development, providing support services and sustaining the efforts of the first time-entrepreneurs.

It would be worthwhile to mention the name of ICAR-NDRI, a premier institute of dairying in India, when we discuss about dairy related ventures. ICAR-NDRI has developed considerable expertise over the last five decades in different areas of dairy production, processing, management and HRD. The institute is continuously working to develop R&D and HRD programmes to better serve the nation in terms of food security, employment generation, poverty alleviation and economic prosperity.

Keeping in view the above facts the present study was based on two important units of ICAR-NDRI, KARNALi.e.BPD (Business planning and Development unit) and the WEL (Women Empowerment Lab) unit. The BPD (business planning and development unit) of the institute was established under the aegis of NAIP (National Agricultural Innovation Project). The main objectives of the BPD unit are:-

- To promote dairy and food agri-business entrepreneurs through enhancing their technical and business skills;
- Commercialization of dairy and food technologies ;
- Provides services on marketing assistance quality evaluation, R&D (Research And Development).

It also assists small entrepreneurs for setting up of their business ventures. The next training unit undertaken for the research study was WEL (Women empowerment lab), The WEL was established in the year 2012 and became operational on 21/05/2013 under Dairy Extension Division of the institute. It has been developed to impart training in the field of dairying and food processing to women SHGs of Karnal and nearby areas.

The main objectives of WEL are as follows:-

- Creating awareness about dairy ventures:,
- Mobilization of women SHGs to adopt these technologies as an enterprise for sustainable income generation ;
- To impart knowledge and skills in the field of value added milk products and preservation of fruits and vegetables;
- To develop entrepreneurship skills of farmwomen.

The present study was designed to analyze the effectiveness of dairy based entrepreneurial developmental programmes among the trainees of both the units of NDRI i.e. BPD and WEL. The following specific objectives were formulated for the study entitled as "EFFECTIVENESS OF DAIRY BASED ENTREPRENEURIAL DEVELOPMENTAL PROGRAMMES."

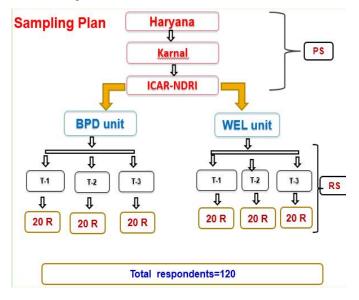
- 1. To analyze the different training domains used during the training.
- 2. To assess the effectiveness of entrepreneurial developmental programmes on the trainees.
- 3. To identify the constraints perceived by the trainers and trainers and to obtain their feedback with respect to training.

Scope of Study:-

The present study was mainly confined to the trainers who had undergone trainings pertaining to entrepreneurship development programmes of the two important training units of ICAR-NDRI, KARNALi.e. BPD (Business planning and development unit) and WEL (Women empowerment lab). The study can provide some input to the dairy- based entrepreneurs for their capacity building. It may also suggest what areas of support should be emphasized to enhance the knowledge, skill and entrepreneurial abilities of trainees. Since assessment of effectiveness is a crucial component of any training programme, this study would also help in the assessment of the extent to which the trainees were benefited. The results of this study will be useful for all those for developing strategies to increase the effectiveness of the training programmes, especially in terms of entrepreneurial characteristics of the trainees. However, the constraints as perceived by the trainees could be of immense help for the training units, in order to plan future activities, in an effective and efficient manner.

2. RESEARCH METHODOLOGY

The two training units of NDRI, Karnal, Haryana was selected purposively for the study. WEL (Women empowerment Lab) located at the Dairy extension division, of ICAR-NDRI and BPD (Business planning and development unit) established under the aegis of NAIP (2006).



From each training unit, 60 respondents were selected randomly, from three trainings each, with total of 120 respondents.

After extensive review of literature, both the dependent and independent variables were selected considering the objectives of the Research work.

The dependent variables i.e. the characteristics that effect the entrepreneurial abilities, was measured in terms of seven dimensions namely- innovativeness, achievement motivation, decision- making ability, risk orientation, Cosmopoliteness, self-confidence and economic motivation.

The scale developed by Chaudhari (2006) was used to measure the first six dimensions and Supe and Singh (1969) to measure the last dimension of entrepreneurial characteristics. The independent variables selected for the study were, age, education, family size ,occupation, social participation, land holding, herd size, annual income, mass media exposure, extension contact. The interview schedule was prepared in accordance with the objectives of the research work. Separate pretest and posttest was conducted with the help of structured interview schedule. The interviews were conducted during the month from august 2016 to Jan 2017.. After a gap of 2 months, post-test was conducted with the help of same structured interview schedule and the concerned respondents were contacted via mobile communications, g mails, and other facilities.

The responses were recorded and filled in interview schedule for both the pretest and posttest, were scrutinized and tested immediately for their completeness in all respects. The tools used for the analysis and interpretation of the recorded data were

- 1. Frequency and percentage
- 2. Mann Whitney U test
- 3. Cumulative square root frequency

3. RESULTS AND DISCUSSION

BPD UNIT:- Majority of the respondents (56%) were found to be middle aged, and majority of the respondents (93%) had educated upto graduation and above ,the reasons for the same, being the fact that trainees at BPD belonged to a good family background with high literacy level with that,53% of the respondents had family size (>5). As far as herd size was concerned, 36.57% of the respondents had medium herd size, and 46.67% of the respondents had medium social participation . The reasons for the above could be the fact that the trainees at BPD unit had membership in different organizations as well as they were actively involved in social issues related to their respective regions. Most of the respondents (55%) had medium mass media exposure. Regarding annual income, it was found that most of the respondents (50%), belonged to medium category.

WEL UNIT:-Majority of the respondents (80%) were found to be young ,regarding education, (40%) of the respondents had educated upto primary level. The reasons for the above data could be the fact that women in the rural areas do not have proper access to higher studies in educational institutions, the importance of women empowerment and female literacy still needs due heed,63% Of the respondents had family size (>5).As far as herd size was concerned, 40% of the respondents had medium herd size and 38.33% of the respondents had medium mass media exposure. Regarding annual income, it was found that most of the respondents (70%), belonged to low category (<3.08 lacs/annum).

The analysis of the training domains of the BPD unit, for the year (2009-2016), shows the fact that within last few years, maximum no of trainings were conducted in the field of commercial dairy farming (42), following that, the no of trainings in case of milk products and processing was, (19) and the total no of trainings in the group (miscellaneous) was

20. The total number of participants were highest for commercial dairy farming, i.e. 932, followed by milk products and processing (270), miscellaneous (137). The total number of faculty members for all the domains ranges from 10-12 in number. The duration of lectures was 1-1.5 hr. for all the domains, and 2.5-3 hrs. Emphasis need to be given on miscellaneous trainings, as well as on duration of practicals as participants need more practical oriented approach as it makes learning easier.

At WEL the duration for number of trainings/year for milk products and processing is high i.e. 8-10 per year as well as the number of trainings for preservation techniques corresponds to 2 per year. The WEL unit is also engaged in providing advisory consultancy services for the formation of SHG (self-help group). The important modules of instruction followed at WEL unit are:-lecture, result demonstration, method demonstration, handouts and group discussion.

4. ENTREPRENEURIAL COMPONENTS OF THE TRAINEES.

BPD UNIT:- Out of all the components selected for the research work, decision making ability and self-confidence was found to have highest effectiveness, (p=0.000).the value was significant at 5% level of significance. The other components also showed considerable increase in pre and posttest mean scores respectively, with p value <0.05 in all the cases. The Z value was found to be negative in all the cases. The training was effective as far as entrepreneurial characteristics are concerned.

DUNIT	Mean score		Mann Whitney		
COMPONENTS	PRE	POST	U-statistic	Z-value	P-value
Achievement Motivation	2.87±0.164	3.32±0.118	1434.5	-1.985	0.047
Cosmopoliteness	6.65±0.154	7.23±0.133	1320.0	-2.632	0.008
Decision Making Ability	8.03±0.211	9.47±0.192	860.50	-5.050	0.000
Economic Motivation	6.02±0.243	6.75±0.177	1410.0	-2.107	0.035
Innovativeness	6.62±0.192	7.20±0.144	1430.0	-2.017	0.044
Risk Bearing Ability	7.73±0.159	8.12±0.159	1524.0	-1.520	0.128
Self Confidence	3.65±0.190	5.10±0.140	785.00	-5.449	0.000
	COMPONENTS Achievement Motivation Cosmopoliteness Decision Making Ability Economic Motivation Innovativeness Risk Bearing Ability	COMPONENTS PRE Achievement Motivation 2.87±0.164 Cosmopoliteness 6.65±0.154 Decision Making Ability 8.03±0.211 Economic Motivation 6.02±0.243 Innovativeness 6.62±0.192 Risk Bearing Ability 7.73±0.159	COMPONENTS PRE POST Achievement Motivation 2.87±0.164 3.32±0.118 Cosmopoliteness 6.65±0.154 7.23±0.133 Decision Making Ability 8.03±0.211 9.47±0.192 Kontraction 6.02±0.243 6.75±0.177 Innovativeness 6.62±0.192 7.20±0.144 Risk Bearing Ability 7.73±0.159 8.12±0.159	COMPONENTS PRE POST U-statistic Achievement Motivation 2.87±0.164 3.32±0.118 1434.5 Cosmopoliteness 6.65±0.154 7.23±0.133 1320.0 Decision Making Ability 8.03±0.211 9.47±0.192 860.50 Economic Motivation 6.02±0.243 6.75±0.177 1410.0 Innovativeness 6.62±0.192 7.20±0.144 1430.0 Risk Bearing Ability 7.73±0.159 8.12±0.159 1524.0	COMPONENTS PRE POST U-statistic Z-value Achievement Motivation 2.87±0.164 3.32±0.118 1434.5 1.985 Cosmopoliteness 6.65±0.154 7.23±0.133 1320.0 -2.632 Decision Making Ability 8.03±0.211 9.47±0.192 860.50 -5.050 Economic Motivation 6.02±0.243 6.75±0.177 1410.0 -2.107 Innovativeness 6.62±0.192 7.20±0.144 1430.0 -2.017 Risk Bearing Ability 7.73±0.159 8.12±0.159 1524.0 1.520

WEL UNIT:-Out of all the components, only achievement motivation was found to have higher effectiveness as the value of p<0.05.The other set of components though showed considerable increase in the pre and posttest mean scores, but the value was not significant at 5% level of significance.The training was not effective as far as entrepreneurial characteristics are concerned.The WEL unit focusses mainly on imparting all the necessary skills through the training programme, which helps the women to apply the same practically in their own local situations.

WEL UNIT		Rank Mean		Mann Whitney		
s.n.	COMPONENTS	PRE	POST	U-statistic	Z-value	P-value
1	ACHIEVEMENT MOTIVATION	0.93±0.095	1.32±0.113	1364.5	-2.490	0.013
2	COSMOPOLITENESS	5.31±0.166	5.49±0.151	1678.0	-0.661	0.509
3	DECISION MAKING ABILTY	4.97±0.295	5.13±0.294	1692.0	-0.572	0.567
4	ECONOMIC MOTIVATION	5.42±0.223	5.74 <u>+</u> 0.223	1604.5	-1.042	0.298
5	INNOVATIVENESS	5.18±0.142	5.40±0.128	1620.0	-0.990	0.322
6	RISK BEARING ABILITY	5.95±0.151	6.18±0.151	1586.0	-1.163	0.245
7	SELF CONFIDENCE	3.91±0.170	4.13±0.173	1643.0	-0.843	0.399

The most important constraints at BPD was the lack of practicals and participative approach, as it was felt by trainees that practicals were lesser than there should be.The most important constraint at WEL unit was that the trainees don't get sufficient time, as they are busy with household works. The other important constraints were,:-Lack of support from family members, lack of proper marketing channel of milk products at village level.

IMPLICATIONS :- The study will be helpful for the organisers /coordinators of the training programme, and for other developmental programmes designed for betterment of voung entrepreneurs. The study will also be helpful in highlighting the importance of such training in socioeconomic development of the trainees. The study will also emphasize on the improvement aspects in the quality of training imparted at both the units. The study was only restricted to the units of ICAR-NDRI, similar research can be conducted in the different training organizations imparting trainings in entrepreneurial developmental programmes. The effectiveness of entrepreneurial components was observed low among the women trainees of WEL, the probable reasons could be lack of sufficient exposure and opportunity for the women of the state, thus similar researches can be conducted emphasizing on the empowerment domain of development of socio-economic profile of the women.

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