

## **Symbolic Adoption of Livestock Based Technologies After Termination of NAIP**

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### **ABSTRACT**

The National Agricultural Innovation Project (NAIP) was launched in the country during 2006. It has been focusing on innovations in agricultural technology. The objective was to address the poverty elevation and creating income generation avenues for disadvantaged people leading to livelihood and nutritional security. The consortium project worth ₹ 18.3 crore was given to MPUAT Udaipur, Rajasthan. Process evaluation of livestock based IFS interventions in terms of symbolic adoption behavior of tribals about Livestock based IFS was carried out in Dungarpur District of Rajasthan, India. Total 104 beneficiaries were interrogated and respondents were categorized into three groups of future possibilities of adoption level along with ranking of sub- interventions to be adopted in livestock. The results indicated that majority 95.19 per cent of tribals expressed moderate certainty for future adoption of livestock based IFS interventions followed by 4.81 per cent of them reporting high certainty of future adoption of IFS interventions even after the termination of the project. No respondent was found under low certainty of adoption. Further, Improved farm implements, Artificial Insemination, Green fodder production, feeding pattern, Nirbhik breed of poultry, processing equipments and selling of products at the collection centers were the sub- aspects of Livestock based IFS for which the NAIP beneficiaries were certain for continuing the adoption after closing of the project. The results are encouraging and reflecting the positive impact of NAIP on tribal beneficiaries in Dungarpur district of Rajasthan state. Based on the findings, it is recommended that the NAIP for livestock based IFS must be replicated elsewhere with the same interventions and the beneficiaries of the area be supported for sustaining the advocated interventions after its termination.

**Key words:** Symbolic adoption, livestock technologies, NAIP

### **INTRODUCTION**

Ambitious National Agricultural Innovation Project (NAIP) was launched in the country in 2006, which focuses on innovations in agricultural technology. It was expected that worth ₹ 1170 crore project, with the assistance of World Bank, would facilitate an accelerated and sustainable transformation of the Indian agriculture so that it can support poverty alleviation and income generation process. This would be achieved through collaborative development and application of agricultural innovations by the public organizations in partnership with farmers' groups, the private sector and other stakeholders. The emphasis in component III of NAIP rural livelihood improvement reflects that several million people in the country remain largely bypassed by the green revolution and modern agricultural practices. A large proportion of these people and of the rural poor lives in less favoured marginal or more complex environments. District Udaipur, Dungarpur, Banswara and Sirohi are tribal and disadvantaged districts where the NAIP consortia project executed for poverty alleviation. The present investigation was carried out in Dungarpur district of Southern Rajasthan with the objective to Study the adoption level of interventions of livestock based IFS among tribal people.

### **METHODOLOGY**

From district Dungarpur two clusters Faloj and Bichhiwara were selected for the present study. Total 10 out of 15 villages (under NAIP) were selected proportionately on random basis for the study. Two sets of respondents were drawn from selected villages. These were (a) First set (94) and (b) Reserved set (10). Some of the targeted respondents were unavailable, therefore, in order to make up the required sample of first set (94) and second set (10), other available beneficiaries, true to the type of targeted respondents were interviewed and included in the study. That way, total size of sample was of 104 respondents (adding first set 94 and second set 10).

### **RESULTS AND DISCUSSION**

The data presented in Table 1 shows that 99 (95.19%) respondents fall under the category of moderate certainty with regards to adoption of LBIFSI technology in future. Only 5 (4.81%) farmers were of high certainty for continuing the adoption of introduced interventions under NAIP for livestock improvement even after its termination.

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**Table 1: Distribution of respondents on the basis of their level of certainty of adoption of livestock based IFS technologies after termination of NAIP without any help**

n = 104		
Level of certainty	f	%
Least certain (< 33 per cent score)	0	00
Moderate certainty (33 to 66 per cent score)	99	95.19
High certainty (> 66 per cent score)	5	4.81
Total	104	100

f = Frequency, % = percentage of respondents

It means that cent per cent tribals were moderately certain to highly certain for continuing the NAIP interventions for livestock development, even after termination of NAIP and that too would be continued without any outside help for the purpose.

#### **Aspects wise certainty of continuation of livestock based IFS technologies by the tribals on their own in future without any help:**

Besides, in depth observations were also taken in order to know as to what particular interventions would be continued by the farmers without any outside help in future. The close look of Table 2 shows that improved farm implements, artificial insemination, green fodder production, feeding pattern, nerbhik breed of poultry, processing equipments, selling of animal products at the collection centres, vermicompostig, improved fodder seeds, animal health insurance, biogas plants, use of managers, chaffing of fodder and chaff cutters would be continued for adoption on priority basis in years to come for sustainable development of livestock, even if any sort of help is not rendered to the beneficiaries. These were prioritized from 1 to 18.

Based on the findings, conclusion can be drawn that the beneficiaries of the study area were quite certain for the purpose of adopting and continuing the interventions of livestock improvement which were introduced to them under NAIP. Such certainty was reflected even if no agency in future would help them financially to adopt the interventions. The findings of the present investigation are in conformity with the findings of Rakshe et al. (1998), Pareek (1999), Kumar et al. (2001), Maity and Sidhu (2001), Solanki (2001), Rao (2002), Verma (2002), Jitarwal (2003) and Kachwaha et al. (2010). At the same time, the findings are contradictory with the results of Intodia (2001)

Recommendation could be made to enhance the adoption of fish production, followed by solar tunnel dryers, mineral mixture and mineral bricks in the area of investigation.

**Table 2: Aspect wise certainty of continuation of livestock based IFS technologies by the tribals on their own in future without any help**

n= 104		
Intervention	MPS	Rank
Artificial Insemination	75.77	2
Nirbhik breed of poultry	69.42	5
Use of mangers	54.04	12
Improved fodder seeds	57.69	9
Chaff cutter	52.88	14
Mineral bricks	49.81	15
Mineral mixture	47.69	16
Biogas plants	54.23	11
Solar tunnel dryer	47.12	17
Animal health insurance	56.92	10
Improved farm implements	77.12	1
Selling of animal products at the collection centres	64.04	7
Processing equipments	68.65	6
Green fodder production	75.38	3
Feeding pattern	75.00	4
Chaffing of fodder	53.85	13
Fish production	22.31	18
Vermi-composting	59.23	8

MPS = Mean per cent score

At last, on the basis of future prospects of NAIP and similar programmes, the conclusion can be drawn that the NAIP project had been executed successfully with all possible care and precautions in order to harvest fruitful results.

Therefore, the project had been proved to be most effective in fulfilling its objectives. The NAIP left indelible impressions on the minds of the beneficiaries for continuing the advantageous interventions of livestock even nobody comes forward to help them financially in future. They may continue the interventions on their own.

#### **CONCLUSION**

It was observed that improved farm implements, artificial insemination, green fodder production, feeding pattern, nerbhik breed of poultry, processing equipments, selling of animal products at the collection centres, vermicompostig, improved fodder seeds, animal health

insurance, biogas plants, use of mangers, chaffing of fodder and chaff cutters, would be continued for adoption on priority basis in years to come for sustainable development of livestock, even if any sort of help is not rendered to the beneficiaries.

The study revealed that there is a need to enhance the adoption of fish production, followed by solar tunnel dryers, mineral mixture and mineral bricks in the area of investigation.

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