

National Agricultural Innovation Project (NAIP)

Title of the Sub-project: Sustainable livestock based farming system for livelihood security in Hoshiarpur district of Punjab

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Crop Husbandry

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1. Introduction:- Punjab is primarily an agricultural State where the main stay of rural masses is agriculture and allied enterprises including animal husbandry. Planning Commission has identified Hoshiarpur as one of the backward districts of Punjab. The *per capita* income of the district for the year 2001-02 was Rs. 21,544/- against the State figure of Rs. 25,248/-. Hoshiarpur district is located in the foothills of Shivaliks in the northeastern part of the State. It has three distinct regions: *Kandi* tract (Sub-mountainous area), undulating plains and Plain. The *Kandi* tract falls under four less developed blocks viz. *Bhunga, Dasuya, Hajipur and Talwara*, and three relatively developed blocks viz. Hoshiarpur-I, Mahalpur and Garhshankar blocks. The *kandi* area is on the up stream side of the Pathankot-Dasuya-Hoshiarpur-Chandigarh road.

According to a report "An Economic Analysis of Investments on Micro Irrigation Structures in *Kandi* Area of Punjab- A Cost Benefit Analysis Approach" published by the Department of Economics, Punjab Agricultural University (PAU), Ludhiana in June 2007, only 36.13 per cent of the population of *Kandi* area is engaged in various economic pursuits, which means two persons depend on one worker for their livelihood. Out of the total working force of the *Kandi* area, about 55.7 per cent are engaged in agriculture including livestock keeping, forestry etc., 30.8 per cent in services, 9.1 per cent in trade, 2.2 per cent in industry and 2.2 per cent in other activities. The family income comprised of two main components- Farm Income (44.6 %) and Non-Farm Income (55.4%). Out of Farm Income, 33.3 % is from agriculture, 6.4 % from dairy and 4.9 % from other sources. Livestock based farming with improved productivity can serve as the additional source of economic development and employment since it has better scope and viability with proper input system in *Kandi* area.

The major problems faced by the people of Hoshiarpur district especially the *Kandi* area are erratic distribution of rainfall, small land holdings, lack of irrigation facilities, heavy soil erosion, land slides, declining soil fertility and frequent crop failures resulting in scarcity of food,

fodder and fuel. Large scale migration of male population in search of work, drudgery of women due to scarcity of drinking water, food and fodder and a general lack of education especially among girls are the common socio-economic problems of this part of the district. The benefits of green and white revolution did not reach the foothill farmers of this district because of lack of irrigation facilities, scarcity of arable land and undulating terrain. This resulted in increased unemployment, migration to plains, mal-nutrition and poor health, and enlarged economic disparities and regional imbalances within the district.

Women make a substantial contribution towards rural economy in the *Kandi* area. Around 86 per cent of the women are engaged in tending of livestock while 70 per cent are engaged in fuel wood collection; 58 per cent in fodder collection; 48 per cent in crop production and 34 per cent in rope making. The overall contribution of women to the total family income was estimated at 36 per cent. Thus, the development of agro-forestry and increase in the yield of fodder grasses would naturally reduce the drudgery of farm-women.

The abject poverty, high population and degradation of the production base are some of the problems defying solution in this part of the State. This programme under the aegis of NAIP has been conceived and developed for understanding the present status of livestock farming and augmenting livestock production system through scientific breeding and feeding practices, optimum health management practices and better marketing facilities in four disadvantaged blocks of Hoshiarpur district namely –Bhunga, Dasuya, Hajipur and Talwara.

2. Consortium Leader

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3. Consortium Partners

Sr. No.	Consortia Partner	Name of the PI / Co PI	Designation	Full address with phone / fax / E-mail
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3.	Dairy Development Department, Punjab	Mr. Jaswinder Singh mann Co-PI	Deputy Director Dairy (HQ)	Deputy Director Dairy (HQ) Dairy Development Dept. Punjab. SCO:1106-07,Sector-22B , Chandigarh Ph and Fax: 0172-2700055, M :09216760133 Email:jsmannpddb@rediffmail.com
4.	The Unati Co-operative Marketing-cum-Processing Society Limited, Talwara.	Mr Jyoti Saroop Co-PI	President	Main Market, Talwara PO: Talwara Tehsil: Mukerian District: Hoshiarpur 01883236321 (Office) 094170-36707 (Mobile) Email: jsaroop@hotmail.com

4.Operational Area : Four blocks of Hoshiarpur district of Punjab

- 1.Bhunga
- 2.Dasuya
- 3.Hajipur
4. Talwara

Present status of livelihood in operational area

Occupation- Agriculture & A.H. – 56%; Services-30.8%; Trade-9.1%,
Industry-2.2%; other-2.2%

Source of income- Farm income – 44.6% (Agri-33.3, Dairy - 6.4,Others-4.9),

Non farm income – 55.4%

Women's contribution to family income - 36%

Higher level of women drudgery

Livestock operations - 86% Fodder collection - 70%

Crop production - 48% Rope making - 34%

Irrigation Facilities- 2/3rd area is rainfed

Excessive growth of *Lantana*- Menace for the area

5. Objectives:-

1. To enhance the productivity of animals through adoption of some improved interventions.
2. To enhance crop production, and promotion of agro-forestry with fodder trees and medicinal plants
3. To promote processing and marketing of various products.
4. Development and training of self help groups for sustainability of various enterprises

6. Interventions Proposed

- Introduction of improved germplasm of animals
- Introduction of improved varieties of crops
- Fodder production and conservation
- Improved feeding and health cover
- Agro-forestry and medicinal plants
- Co-operative processing and marketing
- Dissemination of knowledge and technologies

7. Outcome

- Enhanced family income - 50% (Rs.12500 to 18000)
- Experts- Extensive trainings will help in producing experts on different subjects
- Employment generation in adopted families-
 - Whole Time -1100 Persons
 - Part-Time - >5000 Person
- Empowerment of farm women-
 - Greater role in decision making
 - Increased self-confidence
 - Utilization of income for self and family maintenance
- Improved family nutrition-Availability & affordability

8. Uptake plan

- Regional Research Centres of GADVASU & PAU
Continuation of area specific research and technology transfer programmes for various agricultural and livestock farm practices in Kandi Area.
- The Unati Co-operative Marketing-cum-Processing Society Limited, Talwara
Continuation of activities related with plantation of fodder trees, medicinal plants

and procurement, processing and marketing of the produce.

- Established Self Help Group's
Carry forward the different developmental activities and entrepreneurships

9. Progress made:

- Interaction with State and District Authorities
- Interaction with BDPO's and other officers
- Interaction with Sarpanches
- Identification of Villages and Families
- Development of Performa for base line and subsequent surveys :- Survey of village and beneficiary families is near completion
- Procurement process for different items provided in the current financial year
- Recruitment of RA's/Technical manpower
- Launch Workshop held on 22.12.2008
- CAC Meeting held on 22.12.2008
- NAIP welfare camps were organized at
Koi and Fatehpur villages of Bhunga block on 23 -1-2009
Rampur Haler village of Dasuya block on 28 -1- 2009
Seeprian and Ghaghwal of Hajipur block on 12 -2 -2009
Rakri and Dharpur of Talwara Block on 13-2- 2009
Guided visit to 3rd International Dairy Show held at Jagraon on 18.2.2009

Due to poor health and low milk yield, minerals mixture, uromin licks, dewormers and anti tick solutions were recommended and supplied. Use of feed blocks was demonstrated. Free animal health care facilities were provided in all the camps by Experts of the Universities and participating Institutions.

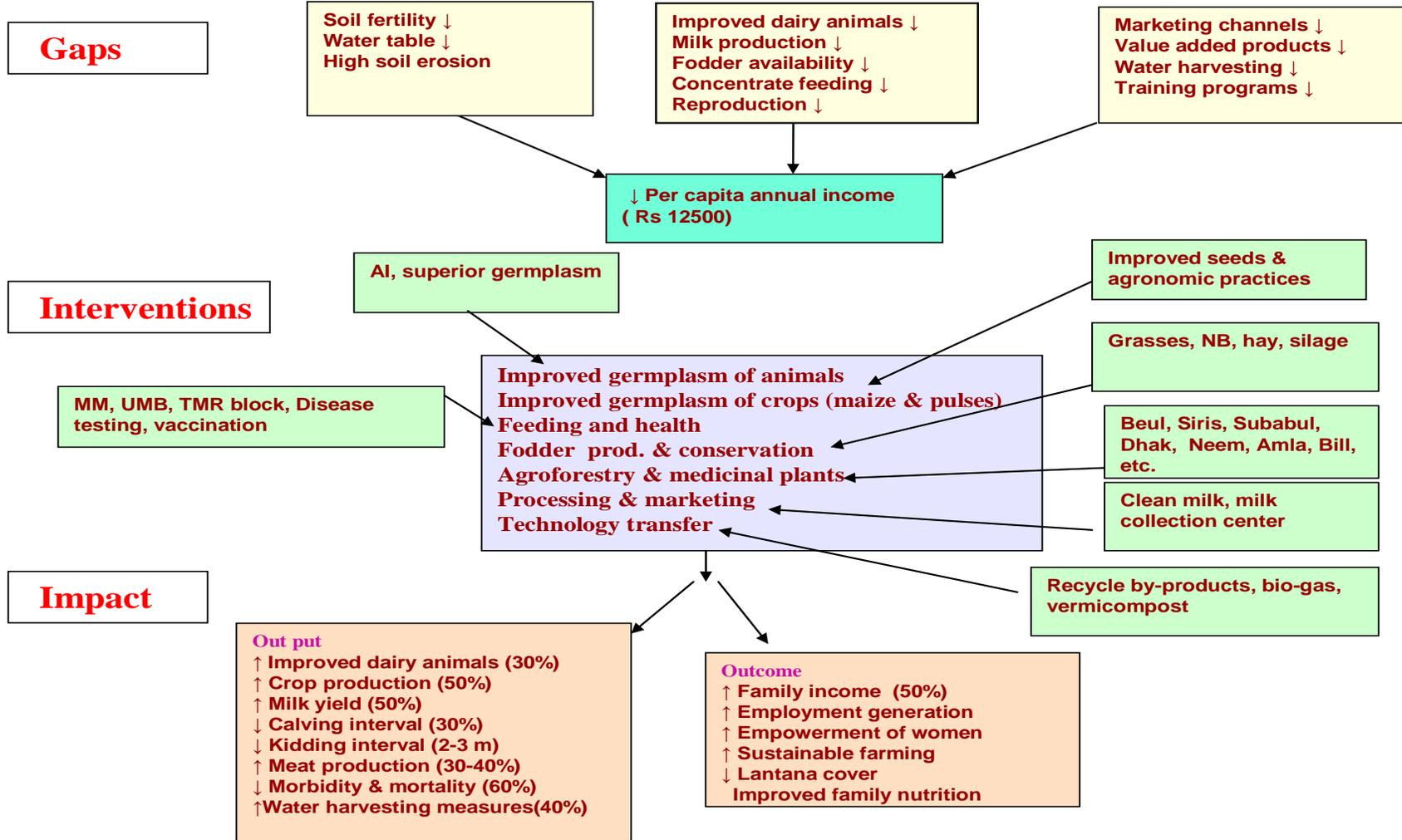
- Along with dissemination of these animal husbandry practices,- soil and water testing, blood testing, animal feed testing, lemon grass and aromatic and medicinal plants and their product formation promotion activities were also demonstrated.
- Activities related to women empowerment and their health care were demonstrated
- Guided visit of the beneficiary dairy farmers was conducted on 18-2-2009 to the International Livestock show organized by Progressive Dairy Farmers Association at Jagraon
(district-Ludhiana)

10. Appointments: Four Research Associates and one Office Assistant have been Appointed whereas two posts of Research Associates (Veterinary) are lying vacant.

11. Forthcoming Events

Guided visits of the beneficiary farmers to the Kisan melas /pashu palan melas to be held at Ballowal Saunkri(District- Nawan Shahr) and Ludhiana
Animal vaccination campaign
Lantana management campaign
Training programmes for different animal species, crops, vegetables etc

Operational plan of work



SELF HELP GROUPS OF DIFFERENT ENTERPRISES AND THEIR FEDERATION

Village Co-op. Societies for different enterprises -Men and Women

