

Acknowledgement

This process documentation research (PDR) on Human and Institutional Development Process (HID) is a culmination of a series of actions including desk works, consultations with key informants, interviews with faculty members of the training institutes, functionaries in the HID cell, persons undergone TOT, senior officers and extension personnel, District Extension team (DET) members, primary producers in the field and many others. We are thankful to all those for their sincere cooperation.

The study team received unstinted cooperation and support from the partners of Indo-Swiss NRMPO including the State Government and the institutions under them, Greater Ganjam Gajapati Milk Union (GGGMU) and the NGOs. We thank for the support and good will from dairy cooperative societies and their staffs, SHGs particularly rearer of small ruminants, members of women dairy cooperative societies and other dairy farmers and the local field staffs of Animal Husbandry Department (AHD).

The library section of IS-NRMPO rendered considerable support to the study team, allowing access to data, information on programmes and activities undertaken by them and provided all documents including annual progress reports, reports of various missions, studies and recommendations and policy documents; and generally enabled to gain the insight required to carry out the PDR. The study team is grateful for the support and encouragement.

The study team takes this opportunity to thank the IS-NRMPO for entrusting this all-important task of Process Documentation of HID in livestock sub-sector of Orissa.

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Lastly, several names are mentioned in the events and processes of the cases presented in this document. The consent of all those actors is taken regarding the use of their names in the cases. The team is greatly indebted to them for giving their consent.

Sujitav Dash,
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FOREWORD

The Indo-Swiss Natural Resources Management Project Orissa (IS-NRMPO) was implemented in 5 phases developed through intergenerational learning: understanding and conceptualization in the pilot phase and operationalization, expansion, consolidation and phasing out in the subsequent phases.

The project through a comprehensive stocktaking and planning exercise helped to understand the farming systems, market possibilities and tribal animal husbandry systems. Through intensive training on extension management and HR skills for senior staff, training on practicalities of extension work for junior and field staff and gender training for personnel of all levels, IS-NRMPO played an enabling role to bring AHD services nearer to the owners of livestock.

Capacity building and institutional development of the partners became the major thrust area. Technical, methodological and management training received priority. Human resources development at all levels along with institutional development in the partner organizations and organization of village based organizations and structures received a priority focus. Preparation of a large number of manuals on training, extension and policy matters, study on role of women and men in livestock, development of appropriate HR skills among personnel, assessment of training needs not only enriched and consolidated the process but also engineered the continuity and change in the process.

Gradually, training in the livestock sector of Orissa became focused, need based and practical. HID process built up organization structures and systems for adoption of participatory extension approach and the internalization of the process of human resources development. Participatory extension approach and human resource development process strengthened 'Participatory Learning Action' in all the blocks of the project districts. Livestock Service Delivery (LSD) in AHD was enriched by HID inputs and geared to meet the needs of the rural livestock holders of the entire state of Orissa, by bringing positive changes in the livestock service delivery systems and structures. Improved service delivery became the major priority of HID in AHD.

HID inputs with a turn around strategy in dairy development made GGGMU a viable, sustainable, independent, and farmers owned organization. The installation of equipments for expansion of processing capacity, preparation of management and staff structure and business plans, strengthening of MIS, and marketing, formation of management development system and cooperative development and strengthening of extension activities and professionalism built by trainings and exposures in fact made GGMU a completely viable enterprise.

Dairy Cooperative (GGGMU) focused on the human, institutional and management aspects of the MPCS and the Union with a mission to create a

corporate identity and professional work culture. Achieving household food security of primary producers became the main focus of the NGO partners.

The thrust of NRM & HID activities included need-based activities through HID cell. HID Cell acted as a platform for change management to improve the live stock service delivery by AHD and other partners. The program supported the development of capacity for improved service delivery, targeting actors within and outside the AHD. New elements like true partnership with shared values and orientation, social mobilization, capitalization of experience and knowledge management evolved in the process.

In this background, the PDR study on HID in livestock sub-sector in Orissa will be of immense value to all. This will be of use for those concerned with sustainable development in general and the role of human and institutional development in poverty alleviation, livelihood and natural resources development. The document has greater significance in view of the broad spectrum of issues and actions, outputs and outcomes, lessons and learning points, success stories and experiences, experimentations and cross-cultural learning inputs incorporated in it. Policy makers, researchers, planners, academicians/researchers, administrators and NGOs/partners would find the work an invaluable aid as well as a reference tool for programme planning, replication, identifying HID inputs, planning institutions for human development and programme implementation.

I hope that the HID process research would be a ready reference for all future researchers and agencies interested in similar projects.

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Abbreviations used

ADRI	: Animal Disease Research Institute
AFDO	: assistant Fodder Development Officer
AHD	: Animal Husbandry Department
AH & DD	: Animal Husbandry & Dairy Development
BAIF	: Bharat Agro-Industries Federation
BMW	: Bi-Monthly Meeting
CBO	: Community Based Organization
CCD	: Centre for Community Development
CDVO	: Chief District Veterinary Officer
CPR	: Common Property Resource
CYSD	: Centre for Youth and Social Development
DEP	: District Extension Programme
DET	: District Extension Team
DRADA	: District Rural Development Agency
ECG	: Extension Core Group
ECG	: Extension Core Group
FARD	: Fisheries and Animal Resource Development Department
FMD	: Foot and Mouth Disease
FMDO	: Foot and Mouth Disease Officer
FSB	: Frozen Semen Bank
GJGMU	: Greater Ganjam and Gajapati Milk Union
HID	: Human and Institutional Development
HR	: Human Resource
HRD	: Human Resources Development
HRM	: Human Resource Management
IG	: Interest Groups
IGP	: Income Generation Programme
IPT	: In Service Personnel Training
ISNRMPO	: Indo-swiss Natural Resources Management Programme Orissa
ISPO	: Indo-Swiss Project Orissa
JD	: Joint Director
KLDB	: Keral Livestock Development Board
LAC	: Livestock Aid Centre;
LCO	: Local Coordination Office
LI	: Livestock Inspector
LIPICA	: Lower Income Peoples Involvement for Community Action
LITC	: Livestock Inspector Training Centre
LPD	: Livestock Production and Dairying
MANAGE	: National Institute of Agri-Business Management
MPCS	: Milk Producers Cooperative Society
NABARD	: National Bank of Agriculture and Rural Development
NGO	: Non-Government Organization
NRM	: Natural Resources Management
NRMPO	: Natural Resources Mangement Project, Orissa
NRTI	: National Resource Training Institute
IS-NRMPO	: Indo-Swiss Natural Resources Mangement Project, Orissa
OBPI	: Orissa Biological Products Institute
OLRDS	: Orissa Livestock Resource Development Society
OMFED	: The Orissa State Cooperative Milk Producers Federation
OMTDC	: OMFED Training and Demonstration Centre
OUAT	: Orissa University of Agriculture and Technology
PRA	: Participative Rural Appraisal;
PRI	: Panchayati Raj Institution
PTD	: Participatory Technology Development
SAFDO	: Sub-Assistant Fodder Development Officer
SLU	: Sustainable Land Use
SGSY	: Swarna Jayanti Grama Swayam Rojgar Yojana
ST	: Scheduled Tribe
SWWS	: Society for Welfare of weaker Sections
TOT	: Training of trainers
UTPS	: Urea Treatment of Paddy Straw
VAS	: Veterinary Assistant Surgeon
VA	: Veterinary Assistant
VIB	: Veterinary Information Bureau
VOTI	: Veterinary Officers Training Institute
XIMB	: Xavier Institute of Management, Bhubaneswar

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EXECUTIVE SUMMARY

Introduction

The Indo-Swiss Project Orissa (ISPO) initiated in the year 1991 was implemented in 5 phases. The project passed its successive stages through intergenerational learning: understanding and conceptualization in the pilot phase and operationalization, expansion, consolidation and phasing out in the subsequent phases. The project goal was to contribute towards an improved productivity of the farm households with emphasis on viable smallholder livestock and dairy production, giving special attention to sustainable land use, in order to raise the living standard of the farmers.

Development objectives: The development objectives accomplished through the project are improving the sustainability of the animal husbandry components in the farming systems of the existing and future livestock holders consistent with their priorities and needs, promotion of dairying as a viable income generating activity, fostering the synergies between land use and animal husbandry, ensuring the participation of women and weaker sections in the development process, promotion and strengthening of farmer organizations and institutions at village level, supporting the institutional project partners to render the required services to the farmers, and initiating policy dialogue and change processes based on project experiences.

HID Process Documentation: From the review of available literature, field interaction and discussion with key players it became clear that various types of interventions made in different phases of the ISPO-NRMPO have left their identity along a clear process of human and institution development in livestock sector in Orissa. This may constitute the core areas for process documentation research (PDR), which may be stated as

Human and Institution Development Process across interventions evolved from stocktaking and planning exercises (including participatory appraisals to understand and identify local farming systems), training need assessment, human resources management, turn around of training system resulting in a training system approach and institution building and human resources capacity building by ISPO-NRMPO in the areas of fodder development, extension, service delivery, dairy development and appropriate and need based soft skills on behavioral aspects to graduate the partners to own the programme and replicate it in wider areas of the state besides playing a facilitating and guiding role in the formulation of relevant policies and strategies to cope up with the processes of privatization and reforms in public services arena and to sustain and institutionalize the initiatives.

Through HID process documentation an attempt is made here for a systematic recording of activities and interactions of various groups, institutions/organizations involved in the field-level implementation of the programme and processes leading to capacity building of existing institutions and organizations and formations of new institutions and structures to accommodate the change and processes evolved by the project based learning. It provides a factual chronicle of the learning process on HID experienced in the implementation of the programme. It contributes to the understanding of social learning processes encountered in the HID process of the project. The documentation will be useful in improving/replicating the HID process of the programme and implementing future programmes. Policy makers, planners, academics, researchers and the partners/stakeholders interested in HID process will also use it.

Structure of the Report: This report is structured as follows. The introduction provides an overview of HID process and highlights the two parts of the livestock sector with greatest potential for pro-poor interventions: dairy and small animal (sheep, goat, poultry) meat production. Section 1 provides institutional setting including the formal and informal structures and the relation between them, different institutions, their functions, as well as the reasons for establishing new structures. Section 2 focuses on capacity building and training, and section 3 describes the outputs and outcomes. The concluding section reviews the lessons learnt with issues and concerns.

Institutional Setting and Institutional Development: In ISPO/NRMPO institutional development process constitutes mobilization and capacity building of existing institutions, development of need based new structures both informal and formal structures in partner agencies like farmers forums, adopted villages, interest groups, Bimonthly Monthly Workshop (BMW) team, extension work group, district extension team, extension core group, HRD Task Force, HID Task Force, new dairy cooperative societies and women milk cooperative societies, mobilization of existing institutions like GGGMU, Livestock Inspector Training Centre (LITC), OMFED Training and Demonstration Centre (OMTDC), Fodder Wing and NGO collaboration, formation of village based institutions by NGOs like village committees, Self Help Groups (SHG) and SHG Federations and linkage with other institutions like financial institutions, insurance company, forest department and AHD; and formation of new institutions like VOTI, HID Cell and Orissa Livestock Resource Development Society (OLRDS).

Training and capacity Building: Prior to the inception of ISNRMPO the department of Animal Husbandry, Government of Orissa had short training component on Artificial Insemination technology. The department

had to depend on GOI to avail some short courses. IS-NRMPO introduced refresher training concept and training to introduce new technology and knowledge. Training on broad areas of management and technology for livestock sector development was totally lacking for the veterinary system including the LIs, the higher group of officers and other stakeholders. There was no training opportunity on extension methodology and managements. The absence of a need based training approach in the department had greatly inhibited to take up new initiatives and the department was not equipped to meet challenges from new changes. The challenge was to develop a community oriented human and institutional system to improve the livestock sector. The new approach introduced by IS-NRMPO is operating as a people centred system by delivering services at farmers' door step by breaking the earlier practice of hospital based services. IS-NRMPO built up a gradual training system approach in the Animal Husbandry Department and among its other partners.

The concept human development was introduced for capacity building of the primary producers/members of milk societies, community based groups and personnel of the partners of ISPO/NRMPO involved in the implementation of project. Training, workshops and exposures broadly were planned as per recommendations based on training and capacity development needs of different levels of staffs of partner agencies in the areas of extension, dairy development, fodder cultivation, behavioral skills/HRM, training skill, quality control, gender, service delivery etc. The critical area of intervention of the project was building the capacity of the primary producer groups through trainings with a focus on their livelihood development, rights, equity, gender and participation in decision-making.

HID Outputs: The key outputs of the HID process were preparation of manuals on

extension, training modules and manuals on HRM and soft skills, a manual on extension and communication, manual on training methodology for the livestock sector, designing of the syllabus for basic LI training course and LI in-service training, manuals on training needs of faculty members of training institutes, senior and middle level veterinarians, Livestock Inspectors, GGGMU & Primary Producers and staff and functionaries of the NGOs, a manual as Extension Model 3 containing butterfly model of extension, documents on project experience and evaluations.

A large pool of trained personnel/beneficiaries including 3200 senior, middle and junior level veterinarians of AHD, a large number of cooperative staff and about 26200 farmers and farmwomen of different districts (pilot project and replicated project districts) are engaged in livestock and dairy development activities. They have become part of the process to improve production and productivity and to contribute to the ongoing reforms in livestock sector in view of their function within a group, organization or institution. 158 trainers of LITC, Fodder staff, DES, DEG members and OVC lecturers have undergone Training of Trainers programme and currently a pool of trainers are available in AHD to meet the growing needs of trainers in livestock sector in the state and about 250 Veterinary Officers and all the staff members of different sections of the Directorate of Animal Husbandry are trained on Computer Application to contribute to the MIS needs in the sector.

HID Outcomes: The Human and Institutional Development (HID) processes have inculcated positive changes within groups, organizations and institutions involved in the programme. The outcomes have been reflected in poverty alleviation, gender equity & sensitivity, economic development, development of state livestock sector policy and training policy, self-reliance of partners

and their clients, democratization in operation of different levels of institutions and greater transparency in governance.

Lessons Learnt: The Key lessons drawn are:

- Inter-institutional collaboration - or networking between institutions - is seen as a growing need, and one for which there is much potential in providing a facilitating role.
- Training of individuals planned and implemented within the context of organizational strengthening and inter-institutional co-operation have influenced the process of change and reforms in livestock sector.
- Training of individuals on technical, social and methodological competencies and HR skills has enlarged the scope of job and job productivity in the livestock sector as shared by the personnel undergone trainings.
- Most of the HID work initially was probably rather supply than demand-driven on the part of the partner organizations but with the HID process a clear and true demand has emerged.
- Terms of co-operation emphasized a multi-partnership approach and contract based arrangements with all partners as well as the subsequent separation of financial and technical co-operation encouraged autonomy, strengthened the viability of partners and reduced dependency.
- From the gained experience and lessons learned through the organization development process, AHD has realized that the process of change can be easier and may turn to a success story if the following are considered and observed:
 - ❖ Institutional development process including the incorporation of change in AHD is a time consuming process. People from all levels are to be acquainted with such fact to extend

their support, enthusiasm and confidence in it.

- ❖ Each organization (partners) has its own unique circumstances. Particular conditions should be considered and the process should be adjusted accordingly, as appropriate.
- The Organization Development process has been a remarkable experience and challenge for AHD. Irrespective of hard times during this process, all people in AHD now have a better understanding and appreciation for HID. This has created openness, transparency and mutual trust.
- The underlying idea of "social capital": NRMPO has achieved a horizontal institutional arrangement by creating social capital, which have a positive impact on the generation of networks of trust, good governance and social equity.
- Social capital has played an important role in encouraging solidarity in overcoming market failures through collective action and common pooling of resources in case of GGGMU. It is therefore seen as a sine qua non for promoting beneficiary/community participation, self-reliant development and future HID internalization.
- Participatory institutional development has mobilized locally coordinated collaborative action of small groups of rural producers and established collaborative linkages between these groups and other local and higher level institutions. Since the poor livestock owners generally lacked economic and physical capital, focusing on strengthening their social capital made sense as it is a pre-requisite for achieving sustainable collective action and useful in acquiring all other forms of capital. This focus implied the strengthening of local populations to better plan, manage and monitor their access to assets.
- Participatory institutional development process has reduced costs at both ends:

the service delivery costs of governments, NGOs and the private sector, and the access costs of the poor in obtaining these services.

- Integrations of participatory technology development (PTD) have enabled to believe that farmers are capable of innovation & experimentations and accept change for better future.
- Participatory evaluation conducted with the farmers has instilled the idea that the evaluation tool can be developed from & within the community.
- Idea of convergence of NGOs, PRI & LCO programme have proved a good synergy and needs to be accelerated further.
- The rural producers with appropriate organisational and technical assistance are the best source for information necessary to identify their problems and the solutions that will suit them and belong to them.

Issues and concerns: The key issues and concerns are:

- One of the major concerns of training in AHD is its sustainability. The financial position of the AHD does not warrant sustenance of training programs. Exploring alternative sources of funding will be a main challenge in the future.
 - ♦ The yet to be solved issues of autonomy to training system, a special cadre of teachers and mobilization of financial resources from alternative avenues are critical to the sustainability of decentralized training system in AHD.
 - ♦ Committed individuals of vision are essential for HID to mature and sustain a successful process. However, it must be officially monitored by the organisation(s) concerned. This implies the need of creating or strengthening an enabling environment.
 - ♦ The follow-up of HID activities has been thin; enhanced monitoring is needed to fully evaluate the impact of HID at all

levels - personal, organisational and inter-institutional.

- ♦ Sustainability has been inadequately addressed in HID activities. Organisational and institutional strengthening is not synonymous with building staffing and implementation capacities for the duration of the project, without clearly addressing how this will function on project withdrawal.
- ♦ The issues that needs serious consideration and attention are autonomous status to HID Cell, consolidation of district training system, a corpus fund for sustaining the activities.

Conclusion

The informal structures created initially at the entry level of the project integrated the primary stakeholders with the HID activities of the project with the higher level personnels and the structures. Project experimentations/trials, methodologies, approaches and related human and institutional development processes were established and humanized in the ground level through these structures. The village-based institutions, subsequently created did not interfere in the role and functioning of the informal structures, rather it helped to integrate the women and men livestock producers with the capacity development programmes initiated by the partner agencies.

Although the informal structures have been undergoing a process of metamorphosis in the old project areas but the functions are likely to continue with the alternative channels or by reorganization of same/similar structures based on future needs, as the process of need selection/conceptualization is internalized by the village based groups/primary stake holders and the higher level structures through ISPO/NRMPO HID approach.

These social/human formations in the livestock sector are likely to sustain the future need and

functioning of the new institutions like VOTI, HID Cell and OLRDS to a great extent, if these new institutions manage to pursue the HID approach created over the years for a couple of years more beyond the life of the project period.

Training and capacity building programmes, by and large have improved efficiency in the production domain at all levels of partners' structure through skill formation and development of new skills, and has strengthened stakeholders' capacity at awareness, information and at practice level. In many areas training inputs has enlarged the scope of work in the partner agencies to deliver services to the primary producers/beneficiaries. It has created value addition in the basic skills of personnel and functioning of institutions. There is a change in the outlook, attitude, leadership and overall capacity of the institutions and personnel to initiate and sustain change. Some readiness is undoubtedly created among the institutions and personnel through HID process inputs to accept and manage change beyond the project life.

HID process has encompassed greater participation of institutions and personnel in decision-making and action relating to policy formulation in Orissa Livestock Sector. A critical outcome of HID process is that of maximizing people's potential to contribute to development by participating fully in all its activities. Through capacity building, individuals, groups and institutions are empowered to at least a level to expand their abilities to more fully participate in the development process. An enabling environment and a realistic investment in both formal and non-formal livestock development education is expected to sustain the ongoing project initiatives. If the present process is discontinued, reconstruction of HID process in the livestock sector is unlikely to happen as such a process built over the years by ISPO/NRMPO is not a rapid process.

I. INTRODUCTION

The Indo-Swiss Project Orissa (ISPO) initiated in the year 1991 was implemented in 5 phases. The project passed its successive stages through intergenerational learning: understanding and conceptualization in the pilot phase and operationalization, expansion, consolidation and phasing out in the subsequent phases. The project goal was to contribute towards an improved productivity of the farm households with emphasis on viable smallholder livestock and dairy production, giving special attention to sustainable land use, in order to raise the living standard of the farmers.

In the course of achieving this goal, the project in its fourth phase created the sphere of NRM by integrating the two sectors: Livestock Production and Dairying (LPD) and Sustainable Land Use (SLU) with the goal to strengthen the human and institutional development of partner organizations for an appropriate NRM program in Orissa.

In the final phase the project goal was redefined to broad base the program and to contribute to the reduction of poverty in rural Orissa through supporting life-promoting processes, which enable rural development to be sustainable, people initiated, people owned and people controlled.

The development objectives accomplished through the project are improving the sustainability of the animal husbandry components in the farming systems of the existing and future livestock holders consistent with their priorities and needs, promotion of dairying as a viable income generating activity, fostering the synergies between land use and animal husbandry, ensuring the participation of women and weaker sections in the development process, promotion and strengthening of farmer organizations and institutions at village level, supporting the

institutional project partners to render the required services to the farmers, and initiating policy dialogue and change processes based on project experiences.

The project approach had elements like adoption of an environmentally sustainable farming system, adoption of participatory approach in the planning, implementation and monitoring activities, institutional development with emphasis on the promotion and strengthening of local institutions and organizations, fostering of human resource development and building the capacity of the partners and existing institutional structures and bases, emphasis on optimal use of local resources, recognition of the role of women in animal husbandry and gender equity and special attention to small holders and weaker sections.

Livelihood through Dairy Development

The process of dairy development included initial entry-level support followed by organizing dairy cooperative societies and creating milk routes, extension, streamlining of milk procurement and distribution, input services, training, studies on dairy development, operational expansion, quality control, product development and promotion, restructuring the union and facilitating the entry of new and emerging players, etc.

Livelihood through Small Animals

In the project districts most of the tribes belong to the category of absolute poor and landless. They depend upon the small animals like sheep, goat and poultry rearing along with other conventional livelihood system. The tribes normally do not consume milk and therefore rearing of dairy animals was not preferred. As most of the villages are on the

Box: 1. Small Animals and Environment

Goats and sheep were frequently accused to be destroyers of forests and pastures for which government anti-poverty programs discontinued distributing goats in the state. But studies (Nadkarni N. S. 1990) show that small ruminants were not more damaging to the ecosystem than the large ruminants; what was needed for both was a proper grazing and browsing management and an adapted stocking rate. As all ruminants were depending on same fodder sources, there was no reason for IPSO not to consider goat development as one component to support the upliftment of resource poor section. (Schmidt, Peter, ISPO, 1993)

hilltop, with abundance of forest cover rearing of small animals is a common practice of every household along with bullocks for their crop cultivation. It was thought to encourage the tribes to intensify the small ruminant rearing to get an additional income to the household through an Income Generating Programme (IGP) by NGOs Starting from the end of the first phase ISNRMPO financed for rearing small animals (goats and sheep) as an income generation programme to provide additional income for the tribes.

Partners

The ISPO collaborated with Animal Husbandry Department (AHD), Greater Ganjam and Gajapati Milk Union (GGGMU) and a number of NGOs. The focus was on strengthening of the human and institutional capacities development of the partners and their clients through human development initiatives, cooperative development, production improvement, development of community based institutions and management system, promotion of income generation programs for resource poor families, demonstration and extension with farmers, milk processing and marketing. Human and Institutional Development (HID) is used as a key process in the graduation of the project over the years. There is an attempt here to document this process for wider use.

Objectives

HID process documentation rests on the assumption that ISPO has initiated an open system of human and institutional process in which solutions to problems has arisen through experimentation and practice rather than through design. Human and institutional development in ISPO is seen as a dynamic process, which may be perceived in different ways by different social and institutional actors and is likely to generate important unplanned outcomes.

Through HID process documentation an attempt is made here for a systematic recording of activities and interactions of various groups, institutions/organizations involved in the field-level implementation of the programme and processes leading to capacity building of existing institutions and organizations and formations of new institutions and structures to accommodate the change and processes evolved by the project based learning. It provides a factual chronicle of the learning process on HID experienced in the implementation of the programme. It contributes to the understanding of social learning processes encountered in the HID process of the project. The documentation will be useful in improving/replicating the HID process of the programme and implementing future programmes. Policy makers, planners, academics, researchers and the partners/stakeholders interested in HID process will also use it.

Scope of Work

From the review of available literature, field interaction and discussion with key players it became clear that various types of interventions made in different phases of the ISPO-NRMPO have left their identity along a clear process of human and institution development in livestock sector in Orissa. This may constitute the core areas for process

documentation research (PDR), which may be stated as Human and Institution Development Process across interventions evolved from stocktaking and planning exercises (including participatory appraisals to understand and identify local farming systems), training need assessment, human resources management, turn around of training system resulting in a training system approach and institution building and human resources capacity building by ISPO-NRMPO in the areas of fodder development, extension, service delivery, dairy development and appropriate and need based soft skills development in behavioral science modules to graduate the partners to own the programme and replicate it in wider areas of the state besides playing a facilitating and guiding role in the formulation of relevant policies and strategies to cope up with the processes of privatization, reforms in public services arena and to sustain and institutionalize the initiatives.

Methodology

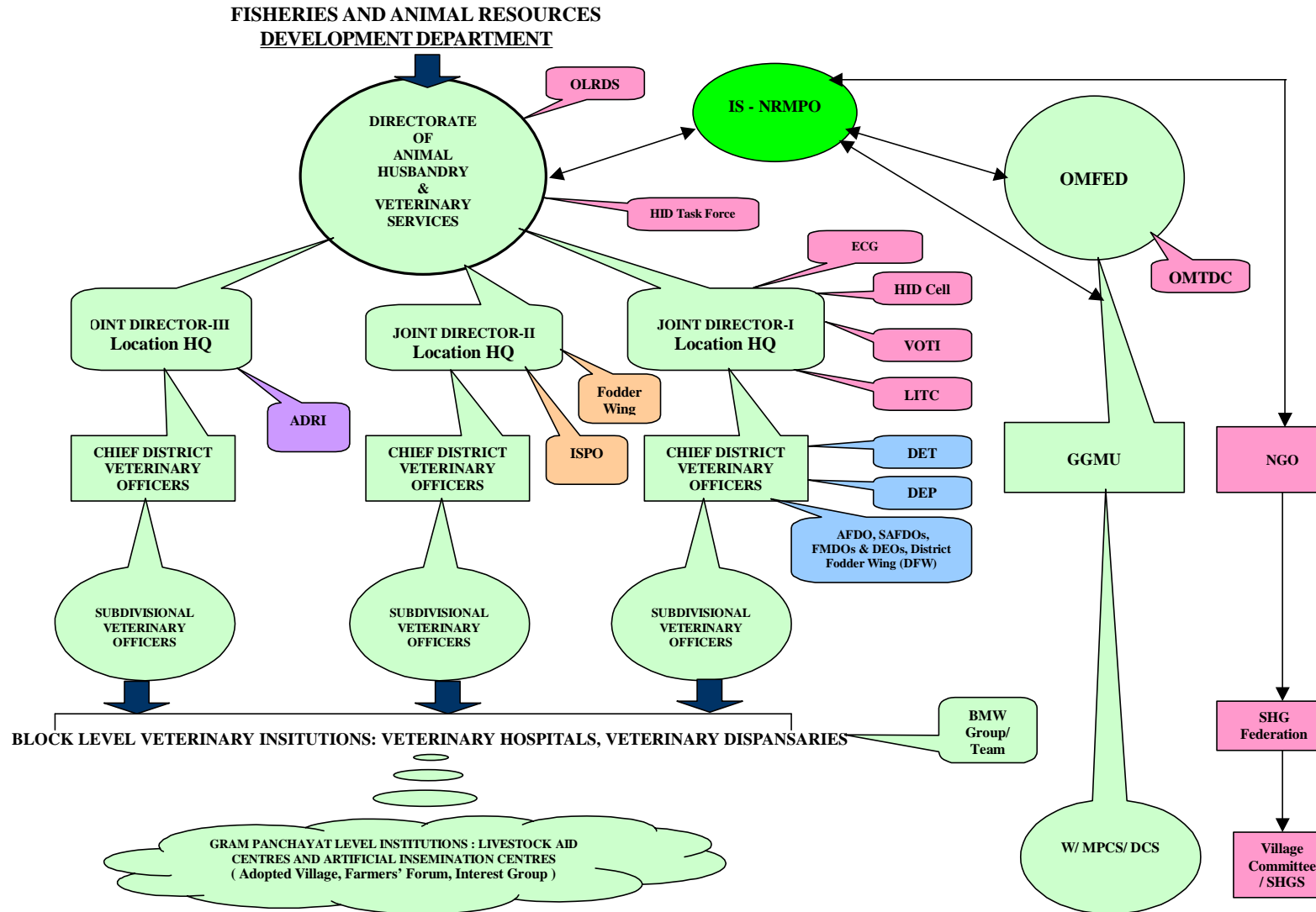
The methodology adopted in the present process documentation research includes

- The project documentation is consulted based on which an alternative history of the project is drawn up to include planned as well as unplanned outcomes
 - Discussion with project participants and discussions with other agencies involved in the project followed up by semi-structured group and individual interviewing.
 - Participant observation techniques are employed around the institutions.
- Key stakeholders relating to the human and institution development process are identified and then interviewed. Key informants'- those who were the most influential stakeholders who directly initiated the process of human and institution development in livestock sector in Orissa including government functionaries and staff at all levels, Civil Society - Non-governmental organization leaders, project-level professionals and donor office staff and, groups such as farmers/ rural women, milkmen community have been consulted.
 - Field Verification: The effect of human and institutional development process in the field is assessed at the levels of firstly actions to produce desired outputs, secondly outcomes, and lastly household livelihood impacts. Relevant cases have been developed during field studies.

Structure of the Report

This report is structured as follows. The introduction provides an overview of HID process and highlights the two parts of the livestock sector with greatest potential for pro-poor interventions: dairy and small animal meat production. Section 1 provides institutional setting including the formal and informal structures and the relation between them, different institutions, their functions, as well as the reasons for establishing new structures. Section 2 focuses on capacity building and training, and section 3 describes the outputs and outcomes. The concluding section reviews the lessons learnt with issues and concerns.

INSTITUTIONAL SETTING



II. Human and Institutional Development Process

Human and institutional development processes are integrally related. In the present analysis, human process development and institutional process development are presented separately without diluting the meaning of the composite concept.

1. Institutional Setting & Development

The term institution has two principal meanings in social science. In management and organisation theory, an institution usually refers to a role or organization; in economics and sociology, an institution is a rule or convention (governance). There are major divergences between these two definitions...the first type of institution resides in deliberately constructed human groupings, the second is diffused among a multitude of people. Both the definitions are meaningful in the context of HID process in IS-NRMPO.

An attempt is made here to analyse the institutional arrangement and human and institution development process through which mechanisms were created, mainstreamed and sustained to promote effective livelihood and natural resources management practices in dairy focused interventions and promotion of small animals.

In IS-NRMPO institutional development process constitutes mobilization and capacity building of existing institutions, development of need based new structures both informal and formal structures in partner agencies like farmers forums, adopted villages, interest groups, extension work group, district extension team, extension core group, HRD Task Force, HID Task Force, new dairy cooperative societies and women milk cooperative societies, mobilization of existing institutions like GGGMU, Livestock Inspector Training Centre (LITC), OMFED Training and Demonstration Centre (OMTDC), Fodder Wing and NGO collaboration, formation of village based institutions by NGOs like village

committees, Self Help Groups (SHG) and SHG Federations and linkage with other institutions like financial institutions, insurance company, forest department and AHD; and formation of new institutions like VOTI, HID Cell and Orissa Livestock Resource Development Society (OLRDS).

1.1. Mobilization of existing institutions and resources

Human and institutional development became a major focus of the project. Initial interventions mobilized existing institutions and resources through capacity building process (qualitatively and quantitatively) and focused on improving the governance. Subsequently there was the need to respond adequately to new demands, which resulted in the formation of adequate structures/ new institutions/rules/governance within the partner organizations for implementation of various programs.

1.2. Development of New Structures

Institutional development included the process of building informal structures at the community level, formal structures within partner agencies (WMPCS, DET, BMW Group/team), capacity building of existing institutions (LACs, LITC, OMTDC, Fodder Wing, GGGMU etc) to cater to various services (breeding, fodder cultivation, dairy development, extension, gender main streaming, policy development) and development of new structures to address the changing needs (WMPCS, VOTI, OLRDS, HID Cell, etc)

1.2.1. Informal Structures

IS-NRMPO evolved a participatory process by emphasizing on the organization of a number of informal groups at the producers level. Various informal community based groups

were formed by partner agencies during the project intervention processes.

1. 2.1.1. Farmers' forums were formed in the project villages and one of the members of the forum was selected as a host who kept the bull provided by ISPO to promote natural breeding. After initial support to stabilize the process, subsequently the natural breeding programme was handed over to the members of the Breeders' Forum. As per the decision taken by the forum, the concerned bull hosts/members of the breeders' fora/villagers/MPCS of GGGMU became the owners of bull.



1.2.1.2. "Adopted" village: For the start of the new participative extension approach, each LI adopted one village where s/he focused his extension in the beginning by conducting monthly meeting. In the first and second village meetings, a thorough situation analysis was made by looking at resources and environment of livestock production by drawing a village map and recording the salient features related to livestock production. Issue based topics were discussed in the meetings.

1.2.1.3. Subsequently, Interest Groups (IGs) were formed in all adopted villages for extension programme. Most of the AH activities were taken up by the Interest Groups through village meetings and appraisals of activities were made by the farmers.

1.2.2. Formal Structures in Partners Agencies

1.2.2.1. To enable effective interaction of AHD-ISPO, on-farm fodder teams were formed in district head quarters in each district bringing together the staff of the relevant disciplines: AFDOs, SAFDOs, FMDOs and DEOs, under the leadership of CDVOs and DESs. The group was linked with District Fodder Wing (DFW).

1.2.2.2. The idea of Extension Core Group (ECG) emerged to keep a track with extension experiences and results of implementation of different extension activities. Based on the experience of extension programmes in the pilot project districts, it was felt by the ECG to implement certain extension programmes in 3 new districts of Orissa. The district extension programme (DEP) focused on an improvement of the quantity and quality of advisory services by AHD field staff to livestock owners and caretakers. DEP improved the capacity of district staff to deliver advisory services to men and women farmers and to develop extension packages for the different AH programmes (large animals, small animals, pigs and poultry)

1.2.2.3. In the face of new challenges in extension, at the district level the District Extension Specialist was replaced by a District Extension Team (DET). The CDVO acted as the head of the DET and one of the Veterinary officers was designated as the coordinator of the programme at the district level who acted as liaisoning officer among different actors. A subject matter specialist in extension provided expert support on extension.

The District Extension Team (DET) organized district level extension meetings. It became the driving force of the district programme and the team promoted the extension approach of the AHD. The programme covered all livestock species: large animals, small animals, pigs and poultry. The clients were all livestock holders/caretakers. Livestock development was not forced upon the clients

but was based on the problem solving of farmers/farmwomen. The programme strived a balance between technology transfer and organizing farmers' organizations (cooperatives etc). It also initiated the process on delivery of veterinary services on payment basis by the clients. The team made the communication process two ways, from staff to farmers and farmers to staff.

1.2.2.4. An Extension Work Group was formed. The Extension Work Group initiated the development of a white paper on extension. In the context of the development of a livestock sector policy and the developmental stage of the extension programme, the white paper gave the AHD directions on extension related interventions. The white paper served as a policy strategy document for the AHD on an approach for services to clients, its extension structure and organization, roles and responsibilities of different sections/actors/stakeholders.

1.2.2.5. A Task Force on HRD was formed. One of the mandates given to the task force formed during the second phase of ISPO was to strengthen the HRD functions of AHD. The officers expressed the need for a cell or unit at Directorate to address and co-ordinate HRD related issues at AHD. Human Resource Management (HRM) Training was initiated.

1.2.2.6. Formation of a HID Task Force is one of the key strategies adopted by ISPO to promote Human and Institutional Development (HID) at the Animal Husbandry Department (AHD). HID was accepted as central to the achievement of goals and objectives set by AHD. The Task Force, which was set up initially to serve as a discussion platform to decide on project related activities of ISPO-AHD, gradually began to be called HID Task Force.

- Task Force assessed the feasibility of establishing HID cell, advised AHD in the establishment of HID wing/cell in the Department, designed (created) the AHD

HID cell, served as a platform to discuss, guide and support AHD-HID, monitored and evaluated the activities initiated on the advise of the Task Force

- The task force suggested measures for strengthening VOTI, specified qualification for LI teachers, recommended the establishment of a teaching line for training / teaching, finalized the job charts of LIs and VASs, recommended on HRM training and ensured placement of the right persons for the right posts
- The task Force recommended the JD (Extension) to remain in charge of HID cell designated as JD (HID), included the extension wing of the Directorate in the HID cell, made the Veterinary information wing a part of the HID cell and reorganized the training wing by putting under the HID cell and made the veterinary information office and officer in charge to report to the JD (HID).
- Several corrective measures were undertaken to further improve the role of the HID task force by including adequate representation of senior officers, regularization of membership in HID, participation of special invitees representing sections involved in HID activities, efforts towards effecting increased realisation of the importance of training by GOI, GOO and consequently AHD, change in the agenda from ISPO related activities to AHD concerns
- The Task Force enabled the HID wing to be fully operational and acted as an advisory body to the HID wing to ensure the achievement of its set goals and objectives.

1.3. Existing Institutions

1.3.1. Fisheries and Animal Resource Development Department (FARDD)

The Fisheries and Animal Resource Development Department and the Directorate of Animal Husbandry and

Veterinary Services are the main partner of IS-NRMPO. They were responsible to provide veterinary services to project districts and all over Orissa through veterinary hospitals, dispensaries and livestock aid centers. Training and in-service training for the field staff of AHD and the process of human and institutional development of the AHD was initiated by ISPO/NRMPO.

Project activities of ISPO were implemented in 9 selected blocks of Ganjam District and 4 blocks in Gajapati. A DD level officer of AHD was posted as Project Officer. Two officers from AHD were posted as Executive Training and Extension and District Extension Specialist. A project coordinator was posted at Directorate for liasoning between AHD and ISPO and responsible for HRD-training and extension. CDVOs (G&G) became part of the project management team. A fodder specialist from AHD was posted in ISPO.

The participatory extension approach tried in Ganjam and Gajapati Districts in pilot phase was subsequently replicated by the AHD in other districts of the state. For replication of the project in 3 coastal districts Extension Core Group (ECG) and District Extension Team was formed. HID advisory Committee was formed which advised on the formation of a HID Cell. HID Cell was established which was headed by JD (Extension) later designated JD (HID) and assisted by Support Officer (Training), Support Officer (Extension) and Veterinary Information Bureau (VIB). For liasoning between AHD and ISNRMPO, Work Group on HID was formed.

1.3.1.1. Fodder Wing: The Feed and Fodder Wing of ISPO built collaboration with the Fodder Wing of the department, and the activities of the Feed and Fodder wing of ISPO were extended to three more districts such as Puri, Cuttack and Jagatsinghpur. The capacity of the Fodder Wing of AHD was developed in the process to become a resource pool for animal feeding technologies



for potential actors in livestock development within and outside the AHD. The wing propagated better and more productive species of fodder crops, fodder trees and rangeland grasses/legumes and propagated them in the milk route, which were earlier identified, tried and tested by ISPO. The fodder wing being supported by the project emphasized on increase in feed and fodder resources and utilization for animal nutrition by extensive use of fodder trees and seasonal fodder crops along milk-routes, seed production of fodder trees, involvement of private sector in seed production and trainings on seed production, preparation of relevant training modules on feed and fodder and development of extension folder on F&F as part of the extension manual.

1.3.1.2. Livestock Inspector Training Centres (LITC)

The LITCs were involved in the training of the livestock inspectors. Training curriculums were developed in reference to revised job chart of the LIs and situation analysis and capacity building of LI training. ISPO contributed to various training activities of the AHD including basic training of livestock Inspectors in Chipilima, Bhanjanagar and Bolangir, in-service Training of Livestock Inspectors in Bhanjanagar. Situation analysis on LI basic training, LI in service training, Frozen Semen Bank (FSB) Training was critical steps in building

the capacity of institutions, training content and the teachers.

1.3.2. Greater Ganjam and Gajapati Milk Union (GGGMU)

The cooperation of ISPO was extended to GGGMU with the objective to improve the income of smallholder livestock keepers in the Ganjam and Gajapati Districts through dairy development. The interventions geared towards making the GGGMU a farmers owned, farmers led and farmers benefiting organization in the Anand Pattern of cooperatives.

ISPO support to GGGMU included (a) improvement of infrastructure and provision of milk processing facilities, contribution to the running costs of GGGMU for future viability, support to GGGMU for milk marketing, support for extension services of GGGMU to secure milk procurement and for formation of new societies and support for enhancement of milk production by farming families, (b) transforming towards viability with support for better governance, support to



take extension activities seriously, to get the cooperative programme started and putting the entry of private dairy industry as a challenge rather than a threat before GGGMU, (c) strengthening of the human and organizational capacities for management, cooperative development, production enhancing inputs and demonstration and extension with farmers, milk processing and marketing, creating milk routes, extension, streamlining of milk procurement and

distribution, input services, training, studies, operational expansion, quality control, Product development and promotion, restructuring the Union, accommodating new and emerging players, etc.

In the process GGGMU got a corporate status through a complete turn around strategy and acted as a committed and competent player in marketing of milk and milk products procured from the primary members. The GGGMU has become capable to tackle private sector competition effectively.

Case: 1. GGGMU Withstanding Competition of Private Players

From mid July 2000 the milk selling agents went on a strike demanding more margin, stopping the expansion of engaging more selling agents. The union marketed the milk and continued milk distribution in the market during strike period with the help of farmers of the society, employees of the Union and newly opened outlets taking local administration into confidence. The retailer association was compelled to withdraw the strike. The Union in order to strengthen its position opened more number of outlets in Berhampur.

The dissident retailers started selling milk of different other brands. Milk from Prithviraj Dairy, a private Dairy of Cuttack, Orissa, Berhampur dairy, Vijaya Dairy (AP) and Visakha Dairy.

In the face of stiff competition, GGGMU adopted the strategies like improving and maintaining the quality standard of milk, appointment of more and more retailers in nook and corner of marketing towns, promotion and consumer awareness through wall painting, booth painting and vehicle painting in both rural and urban markets, supply of glow sign board and sun pack boards to retailers, imparting training to the officers, employees, dairy plant workers and attendants on the mission, objectives and need of the hour to focus the customer and quality, supply of Visi-coolers and Deep Freezers to retailers at subsidized rate to maintain cold chain, started weekly marketing route of OMFED milk products covering all the urban and semi urban areas of Ganjam district, manufacturing sweet curd and plain curd at Berhampur Dairy to provide fresh products, introduction of door delivery system by giving incentives for bicycle and on milk sale volume to delivery boy, target oriented incentive system for the retailers, introduction of small three wheeler distribution vehicles instead of mini trucks to reduce distribution timing, increasing frequency of distributing milk including early morning dispatch, morning dispatch, afternoon dispatch and on order dispatch, extension of milk marketing into new area and used market research data.

1.3.3. Orissa Milk Federation Training and Demonstration Centre (OMTDC): The training needs of the Orissa State Cooperative Milk Producers' Federation (OMFED) for its cooperative network, are taken care by the OMTDC and they have a package of custom made programmes varying in course content and duration. With assistance from ISPO, OMTDC conducted trainings on Management



Committee Orientation, Dairy Animal Management, Animal Health Worker, and Farmers Induction Programme for members of DCS and on Formation of Anand Pattern Milk Society to all VAS and LIs posted on milk routes.

1.3.4. NGO Collaboration

The Indo Swiss NRMPO collaborated with CCD (Centre for Community Development), SWWS (Society for the welfare of Weaker Section), both in Gajapati and LIPICA (Lower Income Peoples Involvement for Community Action) in Ganjam district for implementing programme in the tribal villages. The NGOs implemented livelihood support and development programme in the sphere of land use and Animal Husbandry for income generation and food security. A number of Self Help Groups of women were organized by the NGO partners. The NGO partners addressed the issues of food security, promoted income generation by introducing improved small ruminant interventions through training and extension support,

provided alternative extension support to women groups in collaboration with local AHD staff.

1.3.4.1. Village Committees

The NGO partners conducted village meetings, and persuaded the beneficiary families to form village committees. As the villagers are of a homogeneous community, the formation of committees became easier. In the target tribal communities the women had almost equal or even more role in socio-economic matters. NGOs initiated programmes to build the capacities of women committees.

1.3.4.2. Self Help Group (SHG)

Subsequently SHGs were formed in place of women committee in all villages and the SHGs took up the responsibilities of implementing the programme with the assistance of the NGOs. The concept of SHG was well accepted by the tribal women and even in some villages there are more than one SHG. The SHG has their own savings in banks and own repayment system. One of the NGOs has introduced a card system of repayment. The SHG are working as Community Based Organisation (CBO) with regular meeting, maintenance of transaction records and resolution/agenda books relating to decisions taken at group level and matters relating to project implementation.



1.3.4.3. Other Organizations involved

Even though the NGOs are the sole implementing agency of Income Generation Programme (IGP), some other organizations of the state Government like State Animal husbandry Department provided health care facilities, training and extension, the animals purchased and supplied to beneficiaries were examined by local veterinary officers and certified for the coverage of insurance, state

Case: 2. Emerging Players in the Milk Land

The members of Alada MPCs supply about 450-litre milk per day. They have received a Bulk Milk Cooling Unit of a capacity of 1000 liters being assisted by DRDA. Rushi Kulya Gramya Bank has extended loan to almost all households of the village to buy dairy animals. Raghunath, a member of MPCs shared that earlier, bank was reluctant to extend us loan to buy animals. But after seeing the good performance of our MPCs, the bank manager visited our society and assisted us with loans to buy crossbred cows. Raghunath expressed that during natural calamities and peak rainy season often milk could not be transported. Either milk get spoiled or we are to carry it long distance over several hours by bicycles. The support of DRDA will reduce our agony. Milk upto 1000 litres can easily be preserved in the village itself. Raghunath feels that the ground is created after the intervention of ISPO and GGGMU.

forest department issued license to some traditional goat and sheep keepers for grazing; the Oriental Insurance Company covered the animals of beneficiaries under insurance scheme and marketing agents. The beneficiaries had to depend on such institutions at the initial stage of implementation, but in the process, they have built up their own capability.

1.4. New Institutions

1.4.1. Veterinary Officers Training Institute (VOTI)

The "In-service Training Personnel Institute" was renamed as "Veterinary Officers Training Institute" (VOTI). Training of trainers with support of resource persons of the department and with consultants from

outside was the main activity. Subsequently capacity building of VOTI by ISPO/NRMPO in terms of training infrastructure development, training need assessment, Trainers Training Programme and national and international exposure for the faculty members, and curriculum design enriched the contribution of VOTI to HID process in AHD. VOTI conducted training programmes for all level of officers on extension management, human resource management, principles of extension and communication, training and teaching methodology, TOT, gender, LEI, entrepreneurship development, animal health, feed and fodder, etc. The institute collaborated with other institutes of AHD (LITCs, FSBs, ADRI, OBPI), educational institutes like (OUAT, XIMB, EEI, BAIF, MANAGE), international organizations like (KODIS, LBL, NRTI) and other development organizations (CYSD, NABARD, NRMPO).

1.4.2. HID Cell

The intervention on Human and Institutional Development received an institutional status by the establishment of a HID cell. The HID cell's mandate within HID is to coordinate Training, Extension and Veterinary Information. It acts as a platform for the coordination of the NRMPO supported activities and to build the human resources capacity in AHD. Placing the right persons in the right places, developing policies, guidelines and systems to manage human resources and addressing institutional issues are some of the major mandates of HID cell in AHD. The HID Cell played a critical role for these challenges.

Under the NRMPO program, the HID cell carried out functions like networking and liaisoning with outside agencies and rendering cooperation and services on livestock aspects to Government and non-government agencies in integrated development models. The HID Cell played the interface role for such operations.

1.4.3. Orissa Livestock Resource Development Society (OLRDS)

A formally independent institution has been created known as Orissa Livestock Resource Development Society (OLRDS), which assumes ownership of the breeding infrastructure. Orissa Livestock Resource Development Society (OLRDS) has become the Principal Implementing Agency of the cattle and buffalo breeding plan in the state and transfer to the Society: (i) all the frozen semen production stations in the state; (ii) all LN2 plants; (iii) all existing semen banks, and (iv) all the livestock breeding farms. Creation of the OLRDS made Orissa eligible for financial support from the National Project for Cattle and Buffalo Breeding.

User charges are also being routed to OLRDS. The total collection of user fee is Rs. 49370963 (rupees four crore ninety three lakh seventy



thousand nine hundred sixty three rupees, with an expenditure of Rs 16764968 (rupees one crore sixty seven lakh sixty four thousand nine hundred sixty eight rupees) and a balance of Rs. 32605995 (rupees three crore twenty six lakh five thousand nine hundred ninety five during 2002-2005 March.

14.4. Women Milk Producers cooperative societies (WMPCS): Considering women's participation as important in dairy development, it became necessary to organize separate dairy cooperative society

for women. Women Milk Producers cooperative societies (WMPCS) were organized and new Dairy Cooperative Societies were organized by spearhead team of GGGMU. New milk routes were organized. Steps were taken to increase the viability of the system by closing down unviable societies and shortening the milk routes collecting less milk.

Structural and functional linkages of the institutional formations

Informal network of structures like the interest groups, farmers forum, adopted villages, etc in fact integrated the primary stakeholders with the HID activities initiated in the project and with the higher level of personnel and structures like livestock aid centers, block level project teams, district extension team, and inputs from extension core groups. Project experimentations/trials, methodologies, approaches and related human and institutional development processes were established and humanized in the ground level through these structures. The village-based institutions like the village committees, Self Help Groups (SHGs), SHG Federation at the block level have not interfered in the role and functioning of informal structures but have helped to integrate the women and men livestock producers with the human and institutional development processes initiated through the partners. The village based cooperative societies were organized and strengthened by the initial actions undertaken through the network of informal village based structures. Although the informal structures are undergoing a process of metamorphosis in the old project areas but the functions are likely to continue with the alternative channels or by reorganization of same/similar structures based on future needs, as the process of need selection/conceptualization is already created among the village based groups/primary stake holders and higher level structures through ISPO/NRMPO HID approach.

These social/human formations are likely to sustain the new institutions like VOTI, HID Cell and OLRDS in future to a great extent, if these institutions manage to pursue the HID approach created over the years for a couple of years more beyond the life of the project period.

2. Training and Capacity Building

Prior to the inception of ISNRMPO the department of Animal Husbandry, Government of Orissa had short training component on Artificial Insemination technology. The department had to depend on GOI to avail some short courses. IS-NRMPO introduced refresher training concept and training to introduce new technology and knowledge. Training on broad areas of management and technology for livestock sector development was totally lacking for the veterinary system including the IIs, the higher group of officers and other stakeholders. There was no training opportunity on extension methodology and managements. The absence of a need based training approach in the department had greatly inhibited to take up new initiatives and the department was not equipped to meet challenges from new changes. The challenge was to develop a community oriented human and institutional system to improve the livestock sector. The new approach introduced by IS-NRMPO is operating as a people centred system by delivering services at farmers' door step by breaking the earlier practice of hospital based services. IS-NRMPO built up a gradual training system approach in the Animal Husbandry Department and among its other partners.

The concept human development was introduced for capacity building of the primary producers, members of milk societies, community based groups and personnel of the partners of ISPO/NRMPO involved to implement projects and subsequently to replicate and sustain the programme.

Training, workshops and exposures broadly were planned as per recommendations based on training and capacity development needs of different levels of staffs of partner agencies in the areas of extension, dairy development, fodder cultivation, livestock and environment interactions (LEI), behavioral skills/HRM, training skill, quality control, gender, service delivery etc. The critical area of intervention of the project was building the capacity of the primary producer groups through trainings with a focus on their livelihood development, rights, equity, gender and participation in decision-making.

2.1. Training of Personnel

2.1.1. Training of Trainers

2.1.1.1. Training on teaching methodology for teaching staffs: VOTI, ADRI, FSB, OMTDC and LITC faculty members, Veterinary College teachers and those Officers involved with the management, planning and delivery of training programmes at the district level were trained on TOT to have the required knowledge and skills to design and implement training programmes. The course was expected to enable participants to identify steps in analysis of training needs, discuss critically the different approaches and models of curriculum development with emphasis on participatory approaches, practice the principles of course design to a practical situation, prepare a complete and systematic lesson plan, equip with participative training methods and skills and use of different media in training. Trainers of AHD training institutes have undergone training on case writing and case training, role play, lecture, discussions, demonstrations, practical, field exposure, group works and group presentation with the objective to use participatory method in trainings and to make the sessions learner oriented.

Trainers of LITC and VOTI were oriented on lesson plan development/curriculum design

Case: 3. Feeling of Trainers undergone TOT courses

A trainer (to maintain anonymity) said, "training assignments were handled by untrained persons earlier and the officers perceive this assignment as a punishment posting. After IS-NRMPO intervention several TOTs have been conducted for a number of officers in the department bringing value addition and better image of a trainer's job. It has increased the importance of a trainer. A number of trainers are now available in the department and most of them are interested to opt the trainer's assignment as an opportunity", the person told.

Another trainer expressed that once the most neglected assignment of trainer has now seen increasing and stiff competition by many aspirants. Besides it is perceived that an officer trained as a trainer in the present environment could pursue his/her skill on a long-term basis with alternative career possibilities and there is also a demand of his/her services in other institutions.

One of the trainers who had been trained in TOT expressed with interest, " I learned extension methodology, human resources development, rural development and planning, monitoring and evaluation, besides skills and knowledge on social, economic and managerial aspects. Those subjects were new and provided valuable inputs to address wider issues in the sector. The subjects covered under TOT were never introduced to us in veterinary colleges nor in training programmes attended by us prior to the existence of VOTI", the person said.

The trainer expressed, " I am involved in curriculum design for each subjects including HRD & HRM, economics related to animal husbandry and dairying, techno-economic feasibility analysis, marketing and consumer behavior, market research, various aspects of rural development particularly role of animal husbandry, role of women in animal husbandry and dairying, approaches and strategies for sustainable development, programme planning, monitoring and evaluation, empowerment of poor and women with my other team faculty colleagues. My involvement in the assignment and teamwork has practically enhanced our skill to think and innovate.

and methodologies for the training programs, preparation of training calendar, etc.

A trainee centered teaching methodology was used for the trainers of LITCs for building up participatory approach in dealing with farmers in the extension activities. Carefully designed and tested questionnaires were administered for evaluation of training which yielded a lot of feedback to be used in follow-ups. With the conviction that personal contact

of the trainers with the field centers would bring out more information, each teacher is expected to make visit to two veterinary centers as fixed partners in every one or two months with the objectives to follow up performance of the participants of the in-service training and bring practice related experiences back to the class room.

2.1.1.2. Trainers were trained on a module on HR Skills like motivation, leadership, communication, team building, problem solving and decision-making aspects and another module on monitoring and evaluation skills, management of conflict and collaboration, change management, effective participation in meetings, management of meetings and supervisory skills. They were expected to enhance their conceptual and training skill in HR and behavioral science areas.

2.1.1.3. The faculty members of VOTI and the LITCs were exposed to a workshop on Livestock and Environment Interactions organized in collaboration with International Agricultural center, Wageningen, the Netherlands with inputs on environmental economics, livestock economics, mixed farming, balancing livestock and development, extension messages, etc helped in building the capacity of VOTI to achieve its mandate. The participants were expected to identify suitable topics for a training module on LEI, to design course curricula on LEI, to use suitable methodologies for training in LEI and develop a strategy for awareness creation.

2.1.1.4. A team of trainers was oriented to conduct in-service Training for the departmental staff on extension methodology, human resources development, rural development and planning, monitoring and evaluation. Training of trainers was organized to orient the trainers on social, economic and managerial aspects. A workshop was organized for the trainers to give them insight on the subjects to be taken

Box: 3. The concept of Gender used in Training Courses

The concept of gender used in training courses was to train and build capacity of the stakeholders to involve women and men equally in human and institution development process to sustain the livestock sub-sector activities. Training courses acknowledge that livestock sub-sector is a privileged entry point to promote gender-balanced development in rural areas. It was accepted that livestock ownership patterns (especially for small stock and poultry) appear more equitable than that of other assets (land, capital, knowledge). These reasons have contributed to an increasing inclusion in one way or another of gender aspects in livestock development trainings and extension management.

The training modules were designed to sensitize the project staff on need for incorporating gender issues in project implementation, provided inputs on gender concepts such as farmwomen and men in development approach, gender mainstreaming, gender analysis, gender in project cycle, and inclusion of gender aspects in agricultural and allied sector policy. The goal is to ensure an equality of opportunity and access to benefits for farmwomen and men and to support their active involvement in all project processes. The concept of gender used in training courses was that male extension staff by gender training could as well work effectively with farmwomen. Farmwomen and men could get easy access to extension system. Male and female officers can act as effective trainers for farmwomen. Training courses emphasized for demonstrations, monitoring and evaluation activities to be carried out on the actual quality of participation of farmwomen and men in all forums.

up by VOTI, to finalize the specific training inputs for individual area of each trainer and to develop a training programme for the trainers by taking the help of outside experts as facilitator and resource person. For the first time trainers in TOT were introduced to subjects like participatory training methodologies, adult learning techniques, human resource development & human resource management covering aspects like organizational planning and development, manpower policy, training and development, integration of individual goal to organizational goal, role analysis, performance appraisal, career planning etc; rural development, economics, rural extension and communication, gender issue in development planning, computer appreciation and management information

system, LFA, -etc essential to understand the different social, economic and managerial aspects of society/organization.

2.1.1.5. The trainers of VOTI participated in a workshop to identify and finalize the subjects to be included for training, methodologies to be adopted, evaluation and follow up to be made. The group identified the detailed training curriculum for each subjects including HRD & HRM, Economics related to animal husbandry and dairying, techno-economic feasibility, rate of return, break even and various economic parameter and indicators, marketing and consumer behavior, market research, various aspects of rural development particularly role of animal husbandry, role of women in animal husbandry and dairying, approaches and strategies for sustainable development, programme planning, monitoring and evaluation, empowerment of poor and women, etc. Recently 18 trainers have undergone TOT on entrepreneurship development. The Department of animal Husbandry has engaged them to conduct district level TOTs to strengthen the capacity of AHD staff to mobilize the farmers to form new SHG or to work with the existing SHGs. The veterinarians and livestock inspectors of Ganjam, Cuttack, Anugul, Mayurbhanj, Jagatsinghpur, Keonjhar have been oriented on SHG concept for implementation of the development through existing SHGs.

2.1.1.6. Faculty Members of VOTI were oriented on 'Gender Sensitization', Gender and Development and role of women in agriculture organized by reputed institutes like MANAGE, Hyderabad, XLRI, IRMA, XIMB and other places. The faculty members as expected have designed and implemented similar courses at VOTI.

2.1.1.7. Three officers including trainers were trained on MBA at XIMB who have been assisting in the human and institutional development process by providing strategic

Case: 4. Department Seniors Need My Help in MIS

A senior officer (wanted to maintain anonymity) said that he had the opportunity to participate in several trainings during the project period. He said, " I had very stereotype ideas about women and men's role in agriculture but participation in gender training programme changed my ideas, thinking and perception about gender and it improved my conceptual clarity. Participation in gender training made me to realize the importance of service delivery for both men and women involved in livestock rearing without bias".

He further added, "Training on extension management helped me to know about service delivery approaches and basic concepts and tools of participatory extension. Participatory skills have not only improved my skills on extension but also have reduced my earlier inhibitions to deal with all types of clients. The training has improved my skill to communicate effectively to the farmers and farmwomen" (farmwomen were not earlier accessed to extension services and personnel, the respondent said).

"Training on HR skills has created a process of thinking in me to identify problems and issues and means to approach/solve them. HR inputs have improved my skill to provide better advice to my sub-ordinates and I feel comfortable to present my views to superiors and colleagues". The person feels that it is interesting to work with the farmers in a participatory manner. He further said, "training on evaluation, monitoring, logical frame, MIS, knowledge management, etc have broadened my professional skill and I feel a greater career satisfaction when I use those skill in practice. I am happy that my department seniors need my help for assignments done using Logical frame analysis and MIS".

"Training exposures have created interest in me to learn, implement programmes, see results and when it is required I consult relevant literatures", the person expressed.



skills for effective extension. The course was designed to broaden and deepen the understanding of the principles of extension and communication, so as to assist the professionals involved in extension and rural development to play the role of a catalytic agent in the community to improve farming situation. The course is expected to enable the VAS/AVAS to acquire basic knowledge on extension relevant to the field situation, to acquire skills on participatory rural appraisal, skills on interpersonal relationship in the field and to select and practice appropriate training and teaching methods for different situations and target audiences for transfer of technology. Senior Veterinary Officers were trained on HRM skills. The course provided the opportunity to develop the participants' awareness and understanding of the concepts and practices of management and improve organizational, group and individual effectiveness. The course covers aspects of organizational structure and development, organizational communication, network analysis, training need assessment, performance appraisal, motivation, information management, monitoring and evaluation skills. The participants were expected to learn the techniques of HRM, to be sensitized on the human side of the organization, describe the role and functions of the manager, identify factors affecting motivation and performance, analyse the importance of communication

management , business and policy development inputs in the livestock sector of Orissa.

2.1.2. Training of AHD Staff

2.1.2.1. Training of Senior Officers

- VAS/AVAS of several Districts have undergone training on Principles of Extension & Communication covering courses on extension approaches, functions and methods, communication

in team building, analyse the role of a situational leader, explain the importance of planning, monitoring and evaluation

- Veterinarians with 10-15 years of experience in AHD have undergone Refreshers Training on Livestock Production and Extension to enhance their skills and knowledge on new developments in the sector.
- Field Veterinarians of Ganjam, Gajapati were trained on a capsule training program on Village Extension Programme (VEP) covering aspects of participative rural appraisals, village institution development, community participation in programme planning, motivational skills, communication skills with an objective to provide farmer oriented extension services.
- The CDVO, SDVOs, CDOs were regularly attending bi-monthly workshops along with the LIs and the veterinarians of the block, representatives from ISPO and GMU and Secretary/President of MPCs. Bi-monthly workshops included discussion of subject matter on exposure trips of LIs to successful farms and Unions in other states, self-assessment exercises on the impact of the extension activities involving the farmers, livestock inspectors and responsible officers and the effect of participatory extension approach used by the extension staff, use of extension methods like village meetings, individual contact, and farmer-to-farmer interaction to strengthen the technical knowledge.
- Veterinarians on dairy improvement were trained at BAIF covering various breeding service delivery approaches and basic concepts and tools for participatory extension that are expected to deliver improved livestock services to the farmers by participatory approaches.
- All the field veterinarians of AHD department are trained on animal health. The programme expected the participants to find better options to restore Animal Health for optimal productivity. The

participants were exposed to prioritize different animal diseases prevalent in the field, to establish the relationship between animal health and productivity, to provide tips on recent developments in the field of prevention and treatment of animal diseases, to describe the importance of zoonotic diseases, to identify future interventions for restoring proper animal health and to increase the capacity to diagnose and confirm animal diseases.

2.1.2.2. Training of Extension Personnel

- Senior VASs and ADVOs having more than 15-20 years of experience were trained on Extension Management. The course covered aspects of changing perspective of rural development, community participation in program planning, interpersonal communication and team building skills, logical framework as a project management technique, institutional analysis and competency development, management styles and situational leadership skills. The course is expected to enable the participants to develop their analytical skills to emphasize on extension services for rural development, to improve the facilitation skills to manage extension programme for assured services to the farmers and to enrich the knowledge and skill in participatory planning, monitoring and evaluation.



- District extension team members were trained on Communication skills. The course is designed to increase the knowledge and skill of the AHD field veterinarians of newly adopted districts to strengthen and reorganize extension activities so as to implement AH programme effectively to improve livestock productivity. The training is expected to enable the participants to analyze self and interpersonal communication, to use different communication channels according to need and situation, to equip with skills required for interpersonal relationship in the field, to analyze the role of AHD field functionaries to act as catalyst for livestock development, to acquire knowledge and skills on participatory rural appraisal and to identify the skills required for transfer of technology. The learning inputs include extension functions, interpersonal relationship, communication for effective extension, use of media and effective public speaking skills.
 - District Extension Team members were trained on Managing Extension Programme. The course was designed to improve the knowledge and skill of the AHD field veterinarians with planning and management tools to strengthen the AH extension in the newly adopted districts by HID Cell by providing required advisory services to farmers in the field for improving the livestock productivity. The course enables the participants to manage the block extension programme, to enrich the knowledge and skill in participatory planning, coordination and evaluation and to develop facilitation skills to manage extension programme for assured service delivery to farmers. The course provides learning inputs on role and function of extension manager, community participation in planning, logical framework as a project management technique, situational leadership and management styles, motivational skills and monitoring and evaluation techniques.
 - Senior and field level officers including the extension personnel were provided training on gender issues for their conceptual clarity on gender in AH & D development. It resulted in better understanding and involvement of male members towards role of women in AH activities and supporting them through extension. Gender sensitization programmes were conducted through dialogue, workshop, seminars and trainings which improved understanding the basic concept of Women in Development, understanding the basic concept of farmer family in AH & DD activities and the role and importance of women in AH & DD and made them able to propose pragmatic options for inclusion of Women in Development
 - Women Extensionists, Executive Gender Programme, female VAS-ISPO, Subject Matter Specialist (Gender, Training and Extension) were oriented on 'Gender Sensitization', Gender and Development and role of women in agriculture. Participants were expected to address gender issues including gender-based inequality in extension and service delivery, involving equal participation of men and women in livestock programmes.
 - Training of VAS (30 numbers) and IIs (70 numbers) at KLDB for 1 month improved the performance of those personnel as observed by their department seniors.
 - The Department of animal Husbandry has strengthened the capacity of AHD staff to mobilize the farmers to form new SHG or to work with the existing SHGs. The veterinarians and livestock inspectors of Ganjam, Cuttack, Anugul, Mayurbhanj, Jagatsinghpur, Keonjhar have been oriented on SHG concept for implementation of the development through existing SHGs.
- 2.1.2.3. Training of Personnel of Fodder Wing**
- Departmental fodder staff members received training on fodder cultivation, utilization and land use organized by BAIF



in Urulikanchan (Maharashtra) and Indian Grass Fodder Research Institute (IGFRA), Jhansi as well. The course was designed to assist in acquiring knowledge on fodder production and utilization in relation to feeding management of livestock. The participants are expected to assess the feeding practices of livestock, to update the knowledge on seasonality and production requirement of fodder crop and to prepare an appropriate feeding calendar and utilization pattern of available feed and fodder in a particular season.

- Veterinarians of Ganjam and Gajapati were trained on the feed and the fodder development in Ganjam and Gajapati. They were expected to set-up fodder field trials together with farmers.
- The SAFDOs from newly adopted districts were trained on participatory approach, exploratory trials with farmers on fodder trees and managing information exchange events between fellow farmers and fellow fodder staff,
- Fodder staff were oriented on the approach and methodology to be adopted for Farmer Centered Fodder Tree Programme in the districts of Ganjam, Gajapati, Puri, Cuttack and Jagatsinghpur,
- Fodder staff participated in feedback workshops on exploratory and adoptive trial on fodder trees with farmers as a follow

up of the provision of trial kits to on-farm fodder group of Ganjam, Gajapati, Puri, Cuttack and Jagatsinghpur with the objective to get back an overview of the experiences gained by the executing officers (OFG) in different districts while conducting trials with farmers, involvement of male/female farmers in testing technology options to play a key role in demonstration activities and development of capacity of the fodder personnel through specialized training on participatory technology development.

- Fodder staff of the department of Animal Husbandry were trained on Self and Interpersonal Communication and Interaction. The participants were expected to become critically aware of interested in one's own communication style, to understand the impact of their communication style on professional and personal lives of their own and others and to practice effective communication style.

2.1.2.4. Training of Junior Veterinary Officers (JVOs)

- The newly recruited Junior Veterinary Officers(JVOs)of the Department of Animal Husbandry and Veterinary Services Orissa have undergone induction programme in order to handle their tasks independently in the field. The participants were expected to describe the organization structure and goal, define their expected roles, explain rules and regulations governing the job, identify administrative supports to achieve work goals and analyse and choose a suitable approach to develop a working relationship with the clients.
- The Junior Veterinarians have undergone training on basic computer application Skill that covers skills on spreadsheet, power point and word processing. They are expected to process village and block level data, make presentations and use their skills in documentation works.

- Junior Veterinarians have undergone training on project planning and communication skills that covered aspects of rural development, feasibility analysis of micro-projects, identifying indicators of development, logical frame, cost-benefit analysis, organizing meetings for village institutions, interview skills and basic statistical skills etc with an objective to carry out planning exercises, assist in project formulation and programme development and to share them with the clients and stakeholders.

2.1.2.5. Training of Livestock Inspectors

- The livestock inspectors received training on technical topics and other important topics such as rural development, the role of AHD in rural development, feed and fodder, communication skills, privatization, dairy development, extension, etc. in both basic and in-service trainings. It is expected to make the role of LIs practical and farmer oriented.
- Livestock Inspectors were imparted training on gender and development in Basic and in-service trainings to play a vital role in extending their services to both men and women. Gender issues became a natural topic in all trainings imparted by LITCs. The LIs were trained and exposed to gender awareness exercises, discussions on LI job chart and reflection on the role of men and women farmers in animal husbandry.



- Handouts were used for in-service training instead of completely leaving the participants to rely on notes taken during basic training.

2.1.3. Training of Dairy Staff

- The collection agents were trained at Visakha dairy on milk collection and quality control with the objective to learn the skills of quality milk collection and various quality measures to be adopted to procure clean milk.
- Field level assistants of Ganjam Milk Union were trained on procurement and Artificial Insemination with the objective to manage milk procurement in the field and to meet the artificial insemination need of dairy animals of farmers in the field.



- The cooperative development (CD) staffs received training on PRA and computer skills. The programme covers different participatory rural appraisal techniques and application of basic computer software like word processing, accounts packages, spreadsheet and power point. The CD staff are expected to conduct PRA exercises at the dairy society level, process society level data and maintain books of accounts.
- GGGMU staffs were trained on extension, quality management, milk collection & cooperative development. The staffs are expected to learn supervisory skill on quality

control and to monitor extension activities undertaken by the field staff and organizational skill of dairy cooperatives.

- DCS personnel & Members of DCS were trained on cooperative management and milk production, dairy animal management, society management, and animal husbandry works, management committee orientation in order to apply the skills for management of dairy societies and meet the needs of the member farmers.
- The VAS and LIs posted on milk routes were trained on Formation of Anand Pattern Milk Society in order to take initiative to form Anand Pattern Milk Society in their areas of operation and to explain the farmers about the concept of Anand Pattern Milk Society.
- Training of field staff on clean milk production and marketing concept: it was expected the field staff to transfer clean milk concept to farmers, to ensure clean milk collection at the society level and to promote dairy products in the distribution channels.
- Board of Directors of Union were oriented on the role and responsibility as Farmer Director for proper and efficient management of milk union and to suggest improvement in union functioning from learning of their exposure visit to successful unions.

2.1.4. Training of NGO Personnel

Various training programmes, workshops and exposure visits were organized and Organizational Development process initiated where NGO staffs of various levels acquired skill and awareness to use that in their organizational management and implementation of mini-projects.

- The gender staff of the NGOs were trained on gender including clarity on the concept of gender, gender and development and gender policy to develop a comprehensive gender strategy in their respective organizations, to sensitize their staffs on



gender issues and to address the specific needs of men and women beneficiaries.

- The NGO staffs dealing with micro-credit were trained on organization of SHG federation and social audit, competence building on data processing, role and importance of CBOs and PRI for strengthening federations and issues to be addressed within PRI system. Micro-credit staffs were also trained on grading system of SHGs, which helped NGOs to grade the SHGs using capacity and performance indicators. It was expected the training to provide opportunity to NGOs to further built the capacity of SHGs using the indicators.
- The NGO staffs working on livelihood and NRM attended training cum exposure on Participatory Resource Conservation and Development- collective action on irrigation, forest and land issues, soil and water conservation/low cost irrigation, watershed management, natural resources management, monitoring, evaluation and process documentation.
- The staffs of NGOs dealing with accounts, evaluation and monitoring were trained on use of IT in impact monitoring, record keeping at village level and computer based accounting packages to systematize their operations.
- NGO staffs of reporting and documentation section were trained on reporting and

documentation, which was facilitated by resource persons from CARE to improve documentation of NGOs particularly the IGP and micro-credit programmes.

- Besides the above trainings, IS-NRMPO facilitated various kinds of Capacity building exercises for NGO staff and functionaries. Some of which were:
 - ♦ Brain storing sessions on the approach of mini-project and programme development including logical frame work
 - ♦ Participatory evaluation training was organized for the staff of NGOs
 - ♦ Orientation on PTD process was organized for NGO representatives at ETC Bangalore
 - ♦ PTD coordinators participated in workshop on PTD-Problem' analysis,

micro-planning (development of small agricultural plan) PTD in Paddy, Maize, Ragi

- ♦ Project coordinators were trained on process monitoring to give more emphasis on the process approach of the programme.
- ♦ NGO staffs also participated workshops on PRI to familiarize with the concept of decentralization.

2.1.5. Training of Primary Producer Groups

2.1.5.1. Dairy Farmers

- Members of breeders' forum were trained on natural breeding and artificial insemination concepts and practices to use the skills locally and to meet their own requirements.
- Women members of Women MPCs were



trained in different aspects such as the concept of Anand Pattern Cooperative, management of societies and other AH & DD activities like UTPS, Fodder development, Health & Care of animals, improved breeding and milk marketing to take own initiatives to solve their problems.

- Members of Dairy Cooperative Societies and farmers received training on dairy animal management, society management, milk production and animal husbandry works with exposure visit to other successful Unions to get clarity on the operation of DCs and their role to increase the efficiency of DCs.

Case: 5. She manages her income, her mini dairy farm as well

Damayanti Sethi (a Dalit woman) of village Ambapua has 3 acres of agricultural land and they were solely depending on agriculture. She had a cow of local breed. Being a member of the milk cooperative society, once she had accompanied her husband during an exposure trip to Visakhapatnam in the year 2000 and participated in a training on dairy animal management. Being inspired from her exposure trip and trainings, she persuaded her husband to have a Jersey Cow. She also handed over the personal saving to her husband for the purpose.

Since then she has never looked back. Between 2001-2005, the number of cows in her farm increased to 9, which were purchased from the proceeds of sale of milk and a loan from the Bank. She has 7 crossbred milk yielding cows and she exclusively looks after the cows unless she needs the helping hand of her husband. She supplies 30 litres of milk to the society two times a day. She manages the family purse, feeds milk to her children and she is particular about the health and education of her daughter. She keeps about two litres of milk for family consumption before delivering to society.

Her venture has a good image in the locality, Damayanti shared. She feels better when outsiders pay exposure visits to her mini-dairy farm. She cultivates fodder in a small patch to meet the fodder need of the animals. She expressed that seeing her initiative several couples in her locality have also initiated similar ventures. She cites the examples of a couple Ms. Sanjukta and Santosh Dalai who supply 42 litres of milk twice a day from their 8 crossbred cows.

- Exposure visit of the Board of Directors to successful Unions like Malabar Regional Cooperative Milk Producers Union, Calicut, Kerala to broaden their knowledge and to understand their role to increase the efficiency of the Union.
- Lead Farmers were trained on extension and went on exposure Trip to SARU farm for orientation on different options to meet green fodder scarcity.

2.1.5.2. Rearers of Small Animals

- The income generation programme were

Case: 6. Dudumi no more depends on moneylenders

Dudumi Mandai of Chandangiri village is poor tribal woman having no agricultural land. She had her only experience of rearing goats. Under the Income Generating Programme she was assisted to purchase 2 (F) goats of 6 months old from the local market with a cost of RS.1580/- and the local NGO CCD (a partner of ISPO) had extended a loan of Rs. 1000/- with a condition that the financed amount to be paid back.

Dudumi was trained by the NGO on care and management of the goat. Dudumi reared the goats being assisted by her children. The goats (female) of Dudumi in the process gave birth to 39 kids over a span of 5 years, out of which 4 died. Out of those goats, she had sold 24 male goats with a sale price of RS.48000.

When she became seriously sick, she could use a part of her income for her treatment, and after she was cured she continued rearing goats. She has a good stock of mother goats and female kids to further develop her flock. She is interested to develop the flock without loan and outside financial help. The turning point was Dudumi did not depend on village moneylenders (Sahukar) for her treatment. This is one of the several examples, which demonstrates how rearing of small ruminants, poor especially women can find out alternate ways to manage their livelihood and health care needs.

initiated basing on geographical situation of the villages and existing farming system of the families who in majority are landless and small farmers, and they traditionally keep livestock, particularly small animals. To address their specific needs, the Animal Husbandry activities of the NGOs included rearing of small animals by tribal women, along with fodder development and sustainable land use by means of Natural Resource Management. Experiencing initial



success with a few women beneficiaries in the endeavor the activity was extended to cover more beneficiaries and to about 90 villages.

- Training of Self Help Groups Members: SHG members particularly the educated/literate members of the community were trained on record keeping, accounting and organizing SHG meetings. Training was also provided on management of IGP and revolving fund development and management. The expectation was to reduce their dependency for record keeping on NGOs/outside.
- Orientation of SHG members on IGP, Gender issues, SGSY programme, PRI issues, educational and health issues created awareness and provided information to the members.
- Women beneficiaries were oriented and involved actively in monitoring the programmes implemented in their communities. It was expected to increase their participation and the level of transparency in programme implementation.
- Training of SHG members on Revolving Fund Development and Management: The women members were trained on creation of revolving fund, repayment of the loan amount after selling of animals, deposit and management of refund amount to the Women Committee or Self Help Groups as

Case: 7. Jibani bought her first piece of land

Jibani Naika of Jannigaon is a poor, tribal woman. She was selected as a beneficiary during 95-96 and financed under Income Generating Programme through goat rearing. She purchased 4 female goats from local market with financial assistance of Rs.2000/- from CCD, a NGO partner of ISPO.

Jannigam is a hill top village, and there are ample fodder tree resources, created by plantation of fodder trees. Jibani reared the goats. Her family members assisted her in the management. Unfortunately one of her mother goat died and of the 3 female goats she had 4 kids born. She sold a couple of her goats for Rs.6700/- in 1999 and She also received Rs.350/ from the Insurance Company for her dead goat. She paid back her loan amount of Rs.2000/. She utilised the rest amount of Rs.5050 for purchase of land. During 2000-2005 She has sold 21 goats with a total sale proceed of Rs. 37000. Now she has 9 goats in her stock.



In some villages there is practice of castration and it is done by their own/local methods.

- Revolving Funds, the idea of accumulation of the repaid amount as Revolving Fund, method of rotation of the amount, managing more stocks, marketing, management of community bucks, goat and sheep rearing etc. The idea was to strengthen the revolving fund and to reduce the dependency of the poor beneficiaries on moneylenders to meet their family consumption needs.
- The beneficiaries from tribal villages were given training on health of livestock and their management. Prior to this the women beneficiaries were oriented on different types of animal husbandry activities with emphasis on rearing of small animals. It was expected the beneficiaries to have basic skills/information of rearing all types of animals.
- The village animators and health workers were also trained on first aid treatments by the trainers from Animal Husbandry Staff, CDVO, SDVO, VAS and Livestock Inspectors. The HID Cell staffs were also involved in training them as community animal health workers. The trained persons were expected to make follow up by treating the animals with the help of LIs for the common diseases.
- The beneficiaries are given training on health management and castration. But castration is not a practice in tribal villages.
- Regular health camps are organized at village level by linkage of animators/field coordinators/cluster coordinators with local AHD staff. Regular deworming and vaccination is being done at Camps and at village level by the AHD staff and by the women health workers, local youth trained for such first aid treatment.
- The tribal women are also oriented to contact the local AHD staff at the time of emergency.

Training function for primary producers, institutions and personnel

Training and capacity building programmes, by and large has improved efficiency in the production and productivity domain in livestock sector for all levels of partners' structures through skill formation and development of new skills and has strengthened stakeholders' capacity at awareness, information and at practice level. In many areas training inputs have enlarged the scope of work in the partner agencies to deliver services to the primary producers/beneficiaries. It has created value addition in the basic skills of personnel and functioning of institutions. There is a change in the outlook, attitude, leadership and overall capacity of the personnel and institutions to initiate and sustain change. Some readiness

is undoubtedly created among the institutions and personnel through HID process inputs to accept and manage change in the livestock sector beyond the project life.

3. Outputs/Outcomes

3.1 Output

The outputs of the HID process include production of manuals, models, approaches, methodologies, policies and actions on need identification which were expected to support the HID process.

3.1.1. Extension Manual: A comprehensive Extension Manual comprising a number of units on animal health and first aid, Large Ruminant Production, poultry, small animals and pigs, feed and fodder, etc were completed and circulated which acted as a ready reference material for the field functionaries of AHD and as training manual for farmers.

3.1.2. Manual on Training Methodology

- A manual on Training Methodology for the animal husbandry sector was developed by analyzing the interlinked components of facilities and infrastructure, staff of training centers, job chart of LIs and VAs, curriculum/syllabus, learning materials and teaching aids, teaching methodology, evaluation and follow up of training, participants, training strategy, budget and financing and HRD policy of AHD.
- The syllabus for LI basic and in-service training and VA-course were designed as per the revised and elaborated job-charts of the respective personnel with emphasis on practical training. The trainers designed the curriculum
- All trainings of the LIs and the VAs were stratified to a hierarchical structure to make sense for the basic training and for in-service training. To avoid problems and balance this stratification, three lines of

actions were carried: publication of an extension manual, bi-monthly meetings of the functional units (staff who are working together) and curriculum development. The extension manual defined the basic concepts that are used in the curriculum and spread them to a broad audience.

3.1.3. Manual on Training Need

Training needs were assessed for all levels of staff of partner agencies and circulated in the form of manuals to the partners:

3.1.3.1. Training Need of the Trainers:

As trainers' needs were identified to build their capacity in terms of trainers and facilitators, inputs were identified not only in their need for conceptual inputs but also handling groups and knowledge of group dynamics, HRM inputs in areas like leadership, team building, change management, communication, conflict and collaboration, conceptual and facilitation skills, TOT, gender training, practical training on "Social Lab".

3.1.3.2. Training needs of the senior and middle level veterinarians:

Training needs assessment was carried out for Veterinary officers. The key subjects and topics for veterinary officer training were identified and the training needs for the Senior and Middle level Veterinary officers were consolidated. The detailed training needs identified is as follows to address the needs of senior and middle level veterinarians of the AHD: Communication, Motivation, Leadership, Team building, Conflict and collaboration, Supervision, Creative problem solving and decision making, Effective meetings, Training, Performance management, Accountancy, Administrative and other rules, Statistics, Project planning

3.1.3.3. Training needs of the Livestock Inspectors:

Besides theory and livestock oriented training, the felt need was the farmers oriented training

Case: 8. Bhaskar could use his learning in practice

Bhaskar Gouda of Tartana village had gone to Anand for training on clean and pure milk, dairy farming and feed and fodder cultivation. Bhaskar attended the training for the first time. Back to village Bhaskar was asked by his peers to share his experience. Bhaskar not only obliged them but also sensitized his fellows on the entrepreneurship of farmers he interacted during his visit.

Being impressed, Bhaskar himself decided to keep a couple of Jersey cows. At the time of interaction Bhaskar had 4 Jersey cows. All of them were stall-fed. Seeing his initiative, his peers those once searching for jobs, acquired dairy animals by availing loans and their own money. Bhaskar could impress the milk suppliers of his society to adopt the methods of clean and pure milk and to follow basic hygiene practices.

When in the evening the women dropped to the society they were carrying the milk vessel with cover and when the society secretary stained the milk no foreign material was found. Bhaskar expressed that he could influence the society secretary to taste the milk from producer members before measuring it to ensure its quality. It was learnt that other MPCs secretaries also followed this practice after their exposure visit to Kurlanda MPCs. Bhaskar expressed that he needs some further training on dairy that has a demand in the market to have some more income.

and a practice-orientation, scope to the teaching staff to bring back practice-related experiences to the classroom sessions, Training of teaching staff in teaching methodology and in the organization of training courses, organization of field exposure to enable teachers to relate training contents with the farmer reality, and option of making use of the animal resources available at both government farms as well as in the nearby area for practical training, in house preparation of handouts for students which relieved the teachers of dictating notes and giving the opportunity to use other teaching methods, giving the students opportunity to listen to the teacher and each other, to think instead of noting down, to read back contents after lessons, etc.

To enrich the training content the approaches introduced were contact with farmers in the LTC situated local farmers, invitation of the local farmers during classes and practical training or study visits to nearby farms for interviews/small surveys, assignments for the field period to be supervised by a teacher, giving the teachers opportunity to examine

the students after returning back to the center and making use of the experiences the students gained from the field in different classroom lessons. Development of a new syllabus by incorporating important topics such as rural development, the role of AHD in rural development, gender and development, privatization, etc was to make it practical and farmer oriented.

3.1.3.4. Training Need of GGGMU & Primary Producers

Training needs identified during stocktaking and planning exercises were as follows:

- Training of Farmers, DCS personnel & Members of DCS on cooperative management and milk production, dairy animal management, society management, animal husbandry works, management committee orientation,
- Training for collection agents on procurement and AI,
- Training of VAS and LIs posted on milk routes on Formation of Anand Pattern Milk Society, feed and fodder and animal health control
- Training for computer staff of the Union on computer operation,
- Training of field staff on clean milk production and marketing concept,
- Training for Board of directors of Union on role and responsibility as Farmer Director for proper and efficient management, Exposure visit to successful unions, gender training

3.1.3.5. Training Need of the NGO Partners

The training needs assessed for NGO staff and functionaries were project based which included

- Training for IGP staff on technical training on rearing of small animals and dairy animals,

- Training of PTD coordinators on PTD programme,
- Training of project coordinators on programme development including logical frame work, participatory evaluation, concept of decentralization,
- Training of documentation personnel on reporting and documentation,
- Training of Watershed Managers on watershed management, natural resources management, Participatory Resource Conservation and Development, collective action on irrigation, forest and land issues, monitoring, evaluation and process documentation; self monitoring, use of IT in impact monitoring, record keeping at village level;
- Training of Cluster coordinators on micro-credit, training on federation and social audit;
- Training of Accounts staff on accounts,
- Training of all NGO staff on gender including clarity on the concept of gender, gender and development, gender policy

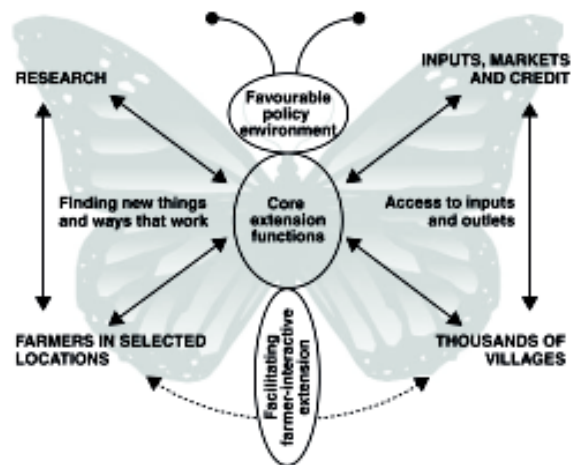
3.1.4. Extension and Communication Module

An extension and communication module was completed and circulated which is expected to develop a sound understanding of the functionaries with regard to scope and the applicability of extension and communication skills in the field of development covering aspects like methods and approaches of establishing extension system within the organization, basics of communication skills, leadership development, qualities of effective extension worker, post extension etc.

3.1.5. Butterfly Model of Extension

Extension Model 3 was developed and introduced as Butterfly Model of Extension. Extension function was initially narrow. The focus was on the extension organization and its clients. A shift was made towards a wider

context focusing on the links and interaction between organizations, farmers and other actors in the context of rural development (e.g. research, input supply, markets, policy makers). It dealt with the functions and roles extension could take on ensuring that these links work. While the first model was the Extension Elephant, the second was the Extension Butterfly. The Extension Butterfly was adopted by depicting the functions of extension in a network of actors in a rural development setting. The elephant model with the narrow focus on extension core functions appeared as one element in the butterfly model. The butterfly model was used as a guiding instrument. It helped to develop a common understanding of extension and clarified differences in understanding.



3.1.6. Livestock Sector Policy Manual

Based on ISPO/NRMPO project experience and learning livestock sector policy analysis was initiated by ISPO/NRMPO which examined the policy environment in the state livestock sector, defined the goals of new livestock sector policy, policy instruments, defined the strategic framework, and suggested a perspective plan for livestock development in Orissa including action plan for cattle and buffalo breeding in Orissa, meat animal development plan, poultry development plan, development plan for animal health care services, fodder development plan, credit and subsidy for livestock sector

development, etc. This resulted in a comprehensive policy document for livestock sub-sector of Orissa. Consultation processes were initiated which included workshop on livestock breeding, farmers workshop, platform meeting of officials of AHD and interview with farmers in the villages. After various rounds of revisions and adaptations, the Orissa State Livestock Sector Policy was approved and it is in the process of implementation.

3.1.7 Training Modules

HRM and other technical training modules were prepared and being used by training centers.

3.1.8 Project Experience and Evaluations Document

Ongoing project experience and evaluations were documented which highlighted the importance of Organization System and Institution Development. AHD staffs acquired practical knowledge and experience in facilitating such processes of change. AHD built up a core competence in HID.

3.1.9. Pool of Trainer

AHD created a pool of trainer by TOT programmes of which some will be core trainers posted at the training centers and others will function as visiting trainers. VOTI took responsibility as an apex training centre to develop a training system approach. This opened up the possibility of decentralization in conducting the training programs by converting the LITCs into Regional Training Centres (RTCs) and training at district level. Several districts like Bhadrak, Nuapara, Nayagarh and Jharsuguda have already initiated training at district level through establishment of District Training Centres.

3.1.10. Pool of Trained Personnel/Beneficiaries

A large number of personnel of the partners/beneficiaries were trained in view of their

function within a group, organization or institution.

- About 26200 farmers and farmwomen of pilot and repicted project districts received orientation/training/exposure on various aspects of dairy development and small ruminant rearing
- VOTI has trained 2650 participants during 1996-2005 under 8 different programme modules and LITCs have trained about 3200 participant LIs during the same time on extension, fodder and other in-service modules.
- VOTI offers 18 courses in a year with 15 numbers of participants in average covering all the veterinarians. Each veterinarian gets opportunity for one training in every 3 years
- 158 Trainers of LITC, Fodder staff, DES, DEG members and OVC lecturers have completed Training of trainers
- About 250 Veterinary Officers have been trained on Basic Computer Application Skill who are expected to assist in the field level data-base development

3.1.11. User Fee

The state has implemented user charges for veterinary and breeding services. All producers are paying for services, and the fees provide the department with discretionary funds. The total collection of user fee is Rs. 49370963 (rupees four crore ninety three lakh seventy thousand nine hundred sixty three rupees, with an expenditure of Rs 16764968 (rupees one crore sixty seven lakh sixty four thousand nine hundred sixty eight rupees) and a balance of Rs. 32605995 (rupees three crore twenty six lakh five thousand nine hundred ninety five) from 2002-2005 March.

3.1.12. Mobility Fund

Mobility fund was created for the purchase of motorcycles by AH field staff in Ganjam and

Gajapati districts. A total of 208 staff (176 LIS and 32 VASs) received the subsidy. From clients it was understood that after vehicle support to LIs, they provided services in improved frequency and promptly attend the calls of the farmers.

3.2. Outcome

The outcomes are evinced from case research, primary data from interviews, participant observations, and findings of field-based studies.



Case: 9. Mobility support made us closer

His client Krishna Rao of Nuagan village received Mr Rama Rao, a Livestock Inspector. Krishna had called Mr Rao to attend the ailment of his cow. Mr Rao attended Krishna's call within two hours of receiving the message. Mr Rao was served with coconut water after his job at Krishna's house. When asked about his visit, Mr Rao said the purpose and shared that earlier it was not possible to attend a call so soon, it sometimes takes days, as he was to cover a large area of radius around 10 Kms. "But after I received a mobility subsidy from my department, it was possible for me to buy a motorbike. It made my mobility easy" Mr Rao said. Krishna and others shared that they get prompt service from the Livestock Inspector. Mohan, another villager added, "earlier our LI was attending our calls and he is very friendly but the motorbike has made us closer. Mr Rao never declines if anyone of us wants a lift while he is on his way, the farmers shared".

3.2.1. Poverty alleviation: The intervention of ISPO in Ganjam nad Gajapati has largely supplemented to the subsistence economy of the landless, small and marginal farm families as evidenced from the income of milk producers and income generated from small animals. The dairy activities have by and large arrested seasonal migration in milk society villages. A majority of farmwomen/farmer households are rising above poverty line by supplementing their income from livestock.

3.2.2. Gender and equity:

- Gender training and gender sensitization programme have greatly influenced the attitude and mindset of the personnel of the Department of Animal Husbandry and other partners about gender issues in the work place, recognizing the role of men

and women functionaries belonging to same position as equal and to avoid any form of gender based discrimination.

- The partners' emphasis on the selection of women beneficiaries for the programme has resulted in active involvement of women in decision-making, purchasing management, marketing, and even contacting the NGO, Bank, insurance agent and AHD department. This has largely given almost equal social status to women with men.
- There is reduced cultural barrier for women in the communities and the families to attend society meetings, deliver milk in the society or verify milk testing in the society or interacting with Livestock Inspector and other extension personnel.

Case: 10. Laxmi Bai planned to have at least 3 Cows to earn from supply of milk round the year

Laxmi Bai is a member of Kinigaon Women's Milk Producer Society. The paddy from their marginal holding hardly meets their cereal need for 2 to 3 months in a year. She availed a loan extended by the milk society and bought a crossbred cow. In 2002 she started supplying 4 litres of milk to the society and in received a good cash income that was a dream for her earlier. But that she got only for a few months in a year until the cow gives milk. The milk yield also fluctuates and declines, as expressed by Laxmi Bai and according her income.

She planned to have at least 3 animals by which she could maintain her income for family living assured from cows. She managed her income, saved day-by-day and borrowed money from a local moneylender @3% interest per month. She bought another cow in 2004 and by 2005 she has her three dream cows and an assured supply of 4-5 litres of milk per day round the year. She shared that the quantity supplied to the society increases but never diminishes. She has been paying the interest on her borrowing from the local moneylender without fail. She wants to buy another cow before settling the principal.

- There is reduced gender bias and greater importance on farmwomen in their families.
- Traditionally among the tribes the men were handling financial aspect, but the newly introduced income generation programme emphasized on the women of tribal villages to handle, and manage this programme. The launching of income generation programme (IGP) through women has a definite implication on gender equity. Women are the sole beneficiaries. Men have a greater role in marketing but mostly women control the purse and with the consent of their husband they utilize the income generated from the sale of animals.
- The women beneficiaries are empowered to build up their capacity and capital for IGP/dairy activities by institutional support through SHGs/ DCSs/ Women MCSs
- Women monitor the IGP, take decision, and they have become assertive on their rights. There is development of leadership among members of women groups.
- Dairy & IGP has built self-confidence and self-dependency among tribal women. The exploitation by the husband and the middlemen is reduced.
- Dependency of women on men for household management has been reduced to a larger extent.

Case: 11. Sebati could manage a monthly income from Backyard Poultry

Mrs. Sebati Naika of Ippaguda village adopted backyard poultry as IGP. SWWS a local NGO partner to start backyard poultry gave her a loan assistance of Rs. 2500/- in 1995. With that she bought Poultry Birds and made a business by selling the eggs. Subsequently she increased the number of poultry birds and sold birds as well. She treats the sick birds herself and there is not a single casualty among her birds. Sebati has a family of 5 members. They consume eggs and also chicken meet. After some months her monthly income reached to Rs.1000/- to Rs. 1500/-. She could buy a small piece of land worth of Rs.2000/- a year back. She also bought two goats worth of Rs. 2000/-.

3.2.3. Economic Development:

- Live stock activities (dairy and small animals), provided additional income to the beneficiaries. The income and the entrepreneurship have a positive social impact in enhancing the social status and economic role of the women.
- Usually tribes mortgage their agriculture land to the non-tribes for day-to-day household consumption needs. The IGP significantly minimized the practice. Getting financial benefit out of the programme, some beneficiaries have utilised the income for the development of their agriculture land. There are cases, where the beneficiaries have utilised the profit amount for purchasing new dresses for their family and spending on festivals. Without this additional money they would have to incur loan from the moneylenders.
- Investment on educating children has by and large become a priority among all types of livestock owners. A sense of entrepreneurship is there with many females managing crossbred cows, backyard poultry and small animals. Credit worthiness of owners of crossbred cows and



rears of small animals has increased as evidenced from the importance of NABARD, local banks and NGOs (bank linkage) to assist owners of crossbred cows and rearers of small animals. The trust and commitment to adopt the change is well reflected in user fee collection and repayment of loans.

- There is success in livestock rearing which is reflected in increase in the number of flocks, number of milching cows, increase of the goat and sheep population, financial benefit and reinvestment of the amount for further purchase of stock and assets (land).

Case: 12. Labour Migration Arrested

Haripur is a small hamlet where all the 40 households became members of the milk society started in the year 1997. The total milk procurement improved from 30 litres in 1997 to 468 litres in 2005. R. Jaga Rao, the Secretary of the Society, expressed that prior to 2002, the adult members of all the 40 households were migrating to Rajmohendry as migrant workers in the absence of any employment opportunity locally. The income from labour work at Rajmohendry was hardly enough to meet their both ends and sending money to home was a dream.

After the milk society started in their village households started rearing buffalo and sold milk to the society. Males and females of the villages received training by ISPO on dairy animal management, rearing of small animals and fodder cultivation. As the area is draught prone hardly they get a full crop in a year. The income from dairy was assured and available locally. Being inspired they started staying back and increased the number of animal to an economic size to have an income in the doorstep. Migration became a history.

When ex-migrant workers of the village Haripur were interviewed it was learnt that most of them had a mix of female buffaloes and crossbred cows. As the income from dairy and agriculture meets their both ends, many said that they stopped going to other states for work. Members who are mostly illiterate emphasize on the education of their children. Rao's son Jagdish studies in second year science in a college at Visakhapatnam. Rao aspires his son to become an engineer.

3.2.4. Policy Development:

- The situation analysis of training for AHD staff initiated by ISPO provided the background for policy thinking on training, improvement of training facilities, and positive attitude of the government towards training leading to the development of a training system approach.
- Various HID initiatives (success and failures) from the field tried by ISPO/NRMPO provided food for thought to Orissa livestock sector functionaries to have a State Livestock Sector Policy. The various lessons from the pilot project districts of ISPO that contributed to policy development include the field trials on natural breeding and Artificial Insemination

initiatives in the plains and hills of Ganjam and Gajapati, fodder cultivation, women participation and women dairy, recognition of the role of women in development, dairy development through GGGMU, development of Farmers Organizations, critical role of LIs and LAC, growth of household income through dairy, development through partnership, training of community link workers and Gomitras and livestock service delivery in remote areas, involving local organizations in extension, approach of right person for right place, impact of training inputs on primary producers, participatory approaches/participatory technology development, extension models, career development of those in the service delivery, participation in decision making process by the primary stakeholders, income generation through small animals, sense of importance attached to the roles of grass root workers/functionaries, initiatives on privatization and decentralization of services, mini-project approach, capacity building of local system and transfer of ownership, etc.

3.2.5. Self Reliance:

- There is positive change in the perception of women engaged in livestock activities regarding their capacity to meet economic needs (as understood during field interviews). Women are managing their income from dairy and rearing of small animals. They are using their income giving priority to the education, health and nutritional needs of their children. Women are also borrowing to invest on additional cow/small animals.
- The income of dairy cooperative societies and the revolving funds of SHGs have also increased and many societies/SHGs are able to meet their day-to-day expenses and the needs of their members.
- In the tribal village, a system of entrustment exists. However, by implementing the IGP, the entrustment system has been reduced,

Case: 13. Kamala could manage the expenses of her daughter's marriage

Mrs. Kamala Dalai is a landless poor farmer of Saradhapur of Tumba Panchayat having 7 members in her family. She was selected by the women SHG in the village as one of the beneficiaries for IGP and financed to purchase 2 mother goats from the local market at a cost of Rs.1500/- by LIPICA a partner NGO during February 1996. During 1996 -1999, her goats gave birth to 8 male and 5 female kids and she had a goat population of 13 with 2 mother goats. She sold 6 male goats and 2 female goats and 2 mother goats for Rs.12800/- in different phases. Out of the financial benefit she paid back the loan incurred during the purchase. She utilized the profit amount for her daughter's marriage and for possessing the legal rights on an encroached land.

and the beneficiaries were capacitated to take up their own programme independently.

- Bargaining power of the women regarding selection of animals, marketing of products and interest rates is increased.

3.2.6. Democratization and Governance:

- Capacity-building efforts through women dairy cooperative, beside economic benefits, has raised the awareness amongst women, built leadership qualities, and helped them to gain a positive self-image. Women have now greater access to information, credit and market operations.
- Women dairy societies have channelled the interests of their members and have made those known in political circles. They have influenced local self-government politics, extension services and project development. Capacity building and decision-making power, as well as self confidence of women has increased.
- In the dairy sector, society members elect their own members. AH staff and GGGMU staff recognize the rights of the society members. At the service delivery and extension level monthly and bi-monthly workshops have increased the transparency by objective evaluation and monitoring of activities. Milk society members, by and large, mostly the males and females directly involved in dairy have information and knowledge to interact with bank, DRDA, Local administration, extension persons, etc.

Box: 4. Perception of Women

- Rearing of dairy animals and small animals is perceived beneficial to farmwomen and additional income has met their livelihood and health care needs
 - The women beneficiaries feel that the project has increased their economic role and social status and men have started recognizing their economic roles.
 - ISPO/NRMPO intervention has created the environment and exposure for them to have access to information from NGO and local LAC. Mentoring of partner NGOs have helped them to approach bank, insurance agent and local AHD staff.
 - Participatory exercises (PRA) integrated them (women) with the main programme with a sense of identity in the process, a sense of importance and a sense of development
 - Women perceive greater control on income from small animals, dairy and back yard poultry than land based activities
 - Training on treatment of sick animals, detection of sickness of animals, feeding of animals, hygiene and cleanliness have become useful while rearing small ruminants
 - Exposure visits to successful projects, interaction with extension personnel and with NGO staff has created assuring condition and confidence for them
 - Organisation of women MPCs and provision of training to women member of MPCs in different aspects such as concept of Anand Pattern Cooperative, management of societies and other AH & DD activities like UTPS, Fodder development, Health & Care of animals, improved breeding and milk marketing are perceived as useful and it has helped them in their initiatives
 - Women perceive fodder scarcity, shortage of grazing land are major hurdle to women dairy
 - NGOs conducted trainings were perceived as useful. They participate more in number as the training programs were conducted by the NGOs in the hours convenient to them, as well as the content of training was loaded with visual materials, which provided better assistance to them.
 - Women perceive training on backyard fodder cultivation, back yard poultry and rearing of goats/sheep as useful and the activities undertaken are remunerative and the income add to their quality of their life and SHG meetings/trainings enrich their knowledge. Tribal women perceive rearing of small ruminants as convenient to them than rearing dairy animals
- The staffs of partner agencies sent for training and exposure have become open to discuss with their seniors and senior trained personnel also encourage participation and have started digesting questioning from juniors if ideas have sense. There is a positive attitude towards training and subsequent transfer of learning to job.
 - The functioning of village based institutions like women village committees, SHGs, SHG federations, Livestock Aid Centres and continuous coordination of programme by NGO and AHD staff at the villages itself has built up the capacities of the farmwomen/

farmers, and there is visible change in their livelihood system

- Regular meeting of the beneficiaries of IGP, either in their village committee or SHG, has increased their self-confidence and problem solving ability. Confidence among tribal women has increased in terms of questioning, seeking clarification regarding programme content and financial aspect resulting in greater transparency and role clarity.

3.2.7.Social Transformation and Change:

There are transformations and changes at the level of institutions, personnel and beneficiaries.

- Human and Institutional Development (HID) processes provided learning, sharing and positive change within groups, organizations and institutions involved in the programme. It enhanced their performance and strengthened effective collaboration between all relevant actors, with emphasis on local empowerment and equity.
- The HID process promoted an organizational development process aiming institutional strengthening, which entailed learning new roles and taking new responsibilities by stakeholders, partner organizations, and groups. The government institutions have largely undergone a process of changing attitudes and mind-set. They have become



more delivery- and service-oriented agencies.

- The training system has influenced the AHD's task in change management related to reforms.
- Trainings have positively influenced the attitude, perception and skill level of personnel towards job and career in livestock sector
- HRM training has resulted in the realization of changes in knowledge, attitude and skills of the officers. HID is playing a potential role in the ongoing reform process of AHD.
- The institutional change from government execution to multi-stake holder involvement, self-help and private initiative entails a change of attitude of all actors. The project has assisted in fostering this change in various cases.
- Women participation has increased in an otherwise conservative society through village based institutions.

Case: 14. Sujata has her plan to put her child in school

Sujata Gouda belongs to Kurlanda village. She was educated up to class 7 while Niranjan Gouda, her husband has studied upto Class 2 only. They have 3 acres of agricultural land besides two female buffaloes. She had the opportunity to participate in an exposure trip to Berhampur and she had also undergone orientation training on keeping crossbred cows. Last year she persuaded her husband to avail a loan to buy a Jersey cow. She said she bought a cow to phase out the buffalo. As buffalo needs a person to take it for grazing, a jersey cow can be stall-fed. She does not want to engage her son to tend buffalo. She wanted to educate him and has put him in a local school. She also wants to put him in a city school at Berhampur near her parental place. She said she could easily look after the cows.

Case: 15. Keeping cattle and milk consumption: new practices in tribal highland

Sukhi Gomang belongs to Palmanguda Female Milk Cooperative Society organized after ISPO intervention. The village has 40 tribal households. Sukhi shared that none of them were tending cattle earlier. They were trading animals. After a society is started near their village at Palmanguda, they saw people supplying milk from nearby villages. Being inspired they started keeping milch animals and 18 households supply milk. The total supply by the tribal households has reached 35 litres per day. Sukhi and Adi Gomang shared that earlier they were not consuming milk but they have started consuming milk in tea and children are fed milk when they are sick or advised by the doctor. Keeping cattle and milk consumption was a new practice among them.

- Tribals in some villages have started rearing milch animals and consuming milk.
- Awareness among the tribal women has increased regarding available services of AHD and there is no fear to interact with extension personnel, and demand for AHD services has increased.
- Prior to implementation of the IGP, the tribals were not taking much care on management and health of their animals and believing on different superstitions. However, this has changed, and they take the help of AHD staff and NGO for health care.
- Social status and socio-economic condition of the beneficiaries has improved. Utilization of funds out of the benefit is used for better living of the family, depending less/never on the moneylenders (sahukar).
- Exposure visits have created new reference groups and aspirations for the member farmers/farmwomen.
- There is a gradual but positive change in farmers' mind-set for quality paid service.

Box: 5. Benefits from Small Animals

There is high degree of success in the programme of rearing small animals by poor especially tribal women, and the overall objective of providing additional income by poor households particularly women was achieved to a great extent.

- Milking of goats and use of manure has increased. Some beneficiaries are also selling milk and manure in addition to their own consumption of milk and use of manure for their own agriculture land totally not using any chemical fertilizers
- Getting off-springs (kids) from the parent female goats/sheep, and thus increasing the goat/sheep population
- The male kids are sold after rearing to a marketable age. The female kids are often kept as replacement parent stock
- Skin of dead animals are sold in the market
- Asset generation in the form of expanded herd through kids has increased manifold in case of goat/sheep.
- Sale of male goats at the age of 1 year to 1 year 3 months with a live body weight of 20 kg at the prevailing market price of RS.100/= per kg live weight
- Sale of male sheep of 1-year age with a body weight of 20-25 kg with approximately cost of RS.2000/-.
- With one female goats of 6 months, reared and bred giving birth to 2 kids, at the initial stage gives a net profit of RS.2800 approximately when sold

- There is a change in the attitude and perception of clients and delivery institutions at the grass root level in terms of greater participation by the implementation of participatory extension models.

4. Key lessons learned

The following lessons can be drawn :

- Inter-institutional collaboration - or networking between institutions - is seen as a growing need, and one for which there is much potential in providing a facilitating role.
- Training of individuals planned and implemented within the context of organizational strengthening and inter-institutional co-operation have influenced the process of change and reforms in livestock sector.
- Training of individuals on technical, social and methodological competencies and HR skills has enlarged the scope of job and job productivity in the livestock sector as shared by the personnel undergone trainings.
- Most of the HID work initially was probably rather supply than demand-driven on the part of the partner organizations but with the HID process a clear and true demand has emerged.
- Terms of co-operation emphasized a multi-partnership approach and contract based arrangements with all partners as well as the subsequent separation of financial and technical co-operation encouraged autonomy, strengthened the viability of partners and reduced dependency.
- From the gained experience and lessons learned through the organization development process, AHD has realized that the process of change can be easier and may turn to a success story if the following are considered and observed:
 - ♦ Institutional development process including the incorporation of change

in AHD is a time consuming process. People from all levels are to be acquainted with such fact to extend their support, enthusiasm and confidence in it.

- Each organization has its own unique circumstances. Particular conditions should be considered and the process should be adjusted accordingly, as appropriate.
- The Organization Development Process has been a remarkable experience and challenge for AHD. Irrespective of hard times during this process, all people in AHD now have a better understanding and appreciation for HID. This has created openness, transparency and mutual trust.
- The underlying idea of "social capital": NRMPO has achieved a horizontal institutional arrangement by creating social capital, which have a positive impact on the generation of networks of trust, good governance and social equity.
- Social capital has played an important role in encouraging solidarity in overcoming market failures through collective action and common pooling of resources in case of GGGMU. It is therefore seen as a sine qua non for promoting community participation and self-reliant development.
- Participatory institutional development has mobilized locally coordinated collaborative action of small groups of rural producers and established collaborative linkages between these groups and other local and higher level institutions. Since the poor livestock owners generally lacked economic and physical capital, focusing on strengthening their social capital made sense as it is a pre-requisite for achieving sustainable collective action and useful in acquiring all other forms of capital. This focus implied the strengthening local populations to better plan, manage and monitor their access to assets.

- Participatory institutional development process has reduced costs at both ends: the service delivery costs of governments, NGOs and the private sector, and the access costs of the poor in obtaining these services
- Integrations of PTD have enabled to believe that farmers are capable of innovation & experimentations and accept change for better
- Participatory evaluation conducted with the farmers has instilled the idea that the evaluation tool can be developed from & within the community
- Idea of convergence of PRI & LCO programme in certain areas have proved a good synergy and subsequently accelerated
- The rural producers with appropriate organisational and technical assistance are the best source for information necessary to identify their problems and the solutions that will suit them and belong to them.

5. Issues and Concerns

- ❖ One of the major concerns of training in AHD is its sustainability. The financial position of the AHD does not warrant sustenance of training programs. Exploring alternative sources of funding will be a main challenge in the future.
- ❖ The yet to be solved issues of autonomy to the training system, developing a training policy, a special cadre of teachers and mobilization of financial resources from alternative avenues are critical to the sustainability of decentralized training system in AHD.
- ❖ Committed individuals of vision are essential for HID to mature and sustain a successful process. However, it must be officially monitored by the organisation(s) concerned. This implies the need of creating or strengthening an enabling environment.

- ❖ The follow-up of HID activities has been poor; enhanced monitoring is needed to fully evaluate the impact of HID at all levels - personal, organisational and inter-institutional.
- ❖ Sustainability has been inadequately addressed in HID activities. Organisational and institutional strengthening is not synonymous with building, staffing and implementation capacities for the duration of the project, without clearly addressing how this will function on project withdrawal.
- ❖ The issues that needs serious consideration and attention are autonomous status to HID Cell, consolidation of district training system, a corpus fund for sustaining the activities.

Conclusion

The informal structures created initially at the entry level of the project integrated the primary stakeholders with the HID activities of the project, with the higher level personnel and the structures. Project experimentations/trials, methodologies, approaches and related human and institutional development processes were established and humanized in the ground level through these structures. The village-based institutions, subsequently created did not interfere in the role and functioning of the informal structures, rather it helped to integrate the women and men livestock producers with the capacity development programmes initiated by the partner agencies.

Although the informal structures have undergone a process of metamorphosis in the old project areas but the functions are likely to continue with the alternative channels or by reorganization of same/similar structures based on future needs, as the process of need selection/conceptualization is internalized by the village based groups/primary stakeholders and the higher level structures through ISPO/NRMPO HID approach.

These social/human formations in the livestock sector are likely to sustain the future need and functioning of the new institutions like VOTI,

HID Cell and OLRDS to a great extent, if these new institutions manage to pursue the HID approach created over the years for a couple of years more beyond the life of the project period.

Training and capacity building programmes, by and large have improved efficiency in the production domain at all levels of partners' structure through skill formation and development of new skills, and has strengthened stakeholders' capacity at awareness, information and at practice level. In many areas training inputs has enlarged the scope of work in the partner agencies to deliver services to the primary producers/beneficiaries. It has created value addition in the basic skills of personnel and functioning of institutions. There is a change in the outlook, attitude, leadership and overall capacity of the institutions and personnel to initiate and sustain change. Some readiness is undoubtedly created among the institutions and personnel through HID process inputs to accept and manage change beyond the project life.

HID process has encompassed greater participation of institutions and personnel in decision-making and action relating to policy formulation in Orissa Livestock Sector. A critical outcome of HID process is that of maximizing people's potential to contribute to development by participating fully in all its activities. Through capacity building, individuals, groups and institutions are empowered to at least a level to expand their abilities to more fully participate in the development process. An enabling environment and a realistic investment in both formal and non-formal livestock development education is expected to sustain the ongoing project initiatives. If the present process is discontinued, reconstruction of HID process in the livestock sector is unlikely to happen as such a process built over the years by ISPO/NRMPO is not a rapid process.

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