Good Practice Note

Building Consensus and Joint Strategies for Fodder Development and Resource Management



REGION: South AsiaCOUNTRY: IndiaSTATES: Andhra PradeshDISTRICT: Kadapa

SOUTH ASIA Pro Poor Livestock Policy Programme A joint initiative of NDDB and FAO

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Rapid Appraisal of Agriculture Knowledge Systems (RAAKS) -A Multi-Stakeholder Process for Building Consensus and Joint Strategies for Fodder Development and Resource Management

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Publisher: South Asia Pro Poor Livestock Policy Programme (SA PPLPP), a joint initiative of NDDB and FAO

Suggested Citation: SA PPLPP (2010) Code: SAGP15, "Rapid Appraisal of Agriculture Knowledge Systems (RAAKS) - A Multi-Stakeholder Process for Building Consensus and Joint Strategies for Fodder Development and Resource Management". Good Practice Note, Delhi, India

Design: Kriti Team, http://krititeam.blogspot.com

Layout: SA PPLPP Coordination Team

Editing: Word by Word

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1. Introduction

Common property resources¹ (CPRs) are often the only source of fodder for landless livestock keepers over most parts of the arid and semi-arid regions of the country. A major challenge these communities face today is the rapid and often irreversible shrinking of CPRs leading to fodder scarcity, and the drudgery and hostility faced during prolonged periods of migration, in search of fodder and grazing lands for their livestock.

Although livestock rearing, as a livelihood option, is as old as agriculture or perhaps even older, the knowledge of livestock keepers and the services offered by them go largely unrecognised today. Livestock rearers are often blamed for the degraded state of common lands, without due regard to the effects of rapid economic development, the increasing demand for land, the poor implementation of existing policies, and the lack of convergence between government programmes.

Rapidly decreasing and degrading CPRs are creating a situation in which forest lands are emerging as the main source of fodder and grazing for livestock rearers. However, *grazing rights* and *access to forests* have always been contentious issues across India, more so in the arid and semi-arid regions of the country, including in states such as Andhra Pradesh. Whereas a large number of natural resource management (NRM) and livelihood enhancement programmes are under implementation in Andhra Pradesh, the status of landless livestock keepers, particularly small ruminant rearers, has not improved much. This can be attributed to the lack of synergy between stakeholders involved in livestock development on the one hand and the implementation of NRM programmes on the other.

The Multi-Stakeholder Process (MSP)

Just as the threat to forest ecosystems and CPRs, due to the constantly increasing livestock population, is apparent, fodder scarcity and the threat to livelihoods of livestock keepers is also very real. The need to balance environmental issues and long-term benefits with short-term priority needs for fodder and livelihood security requires collaboration among and convergence of different stakeholders, including livestock rearers and relevant line departments, as also non-livestock rearing communities and other forest users. In Andhra Pradesh, an effort to facilitate an MSP was initiated to provide a more realistic acknowledgement of the

The Multi-Stakeholder Process (MSP), along with a live field pilot project, was implemented by the Centre for People's Forestry through its Regional Resource Centre hosted by its partner NGO, Centre for Human Resources Development (CHRD), in Thuvvapalli Panchayat, Mydukur Mandal of Kadapa district, Andhra Pradesh. The field pilot project covered four Vana Samrakshana Samitis (VSS), which included nine caste-based hamlets. At the village level, the project created a multi-stakeholder group, with representatives from Women Self Help Groups (WSHGs), VSS, Watershed Committees, Panchayat ward members and both large and small ruminant rearers. At the secondary level, the project coordinated with the Forest, Animal Husbandry, Rural Development, Revenue and Panchayati Raj departments at the district and state levels.

different frameworks within which rural communities co-exist, highlighting the need for greater interaction to build synergy and collaboration. MSPs have been defined as *courses of action where interest groups provide views, make decisions and coordinate activities together* (Woolenberg, 2001). The 2002 Earth Summit stressed that MSPs are

¹CPRs in this context, are different types of lands used for grazing, namely, land put to nonagriculture uses, permanent pastures, culturable waste, and barren land. This does not include forest lands. important for good governance because *these are based on the importance of achieving equity and accountability between stakeholders, and ensuring representation, transparency and participation*². MSPs are, therefore, critical precursors to effective multi-stakeholder-based NRM interventions. Ostrom (1999) specified that "Self-organisation is most likely to occur when forest-users have a common understanding of problems and when they trust one another." However, in India, such processes are not easily superimposed within the government-forest user-group relations given the history of mistrust and past conflict. A right frame of conditions is required to be put in place, therefore, prior to efforts to build synergy between these multiple stakeholders.

In this context, the Centre for People's Forestry (CPF)³, in collaboration with Intercooperation, used an MSP called the Rapid Appraisal of Agriculture Knowledge Systems (RAAKS), together with a Systems Thinking approach to bring convergence between conflicting stakeholders (at both the primary and secondary levels) towards

balancing livestock-based livelihoods and the sustainable use of natural resources.

RAAKS is a participatory action research methodology designed to help stakeholders' gain better understanding of their roles and responsibility and provide a platform to facilitate and enable exchange and dialogue on issues of potential conflict while utilising existing knowledge and information for innovation and conflict resolution. The central elements of the RAAKS approach are team work, targeted information collection, qualitative analysis and strategic decision-making. RAAKS uses a variety of tools to achieve the fundamental analysis, a transparent problem definition and joint recommendations for action (Engel and Salomon, 1997).

MSPs such as the RAAKS approach are used to promote better decision-making by ensuring that the views of all the key stakeholders about a

Shrinking CPRs are leading to increased dependence on forest lands for fodder and grazing. However, forest development projects and programmes even today continue to focus almost entirely on regeneration and productivity enhancement. This puts a direct restriction on grazing-taking away yet another source of fodder for landless livestock rearers. The existence of strong perceptions among administrators on fodder- and grazing-related issues and the absence of a suitable mechanism to facilitate inter-departmental planning and policy development compounds issues further. This situation has resulted in the failure of several fodder regeneration interventions implemented at the village level, rendering livestock keepers incapable of taking up fodder resource management effectively. Livestock keepers are also held responsible for the rapid degradation of these lands.

particular decision are heard and integrated at all stages through dialogue and consensus building. The process takes the view that everyone involved has a valid viewpoint, and the relevant knowledge and experience to contribute to the decision-making process. MSPs, therefore, aim at creating trust among the various stakeholders and arriving at solutions that are a win-win situation for all. These are people-centred approaches and everyone involved takes responsibility for the outcome. The MSPs use various kinds of inclusive and participatory approaches. The stakeholders involved, therefore, have a greater sense of ownership of the decisions they have arrived at and are more likely to comply with decisions made.

This Good Practice note illustrates the strategy and the processes of how RAAKS was used to build stakeholder dialogue, and summarises the effectiveness of a consensus between multiple stakeholders in increasing fodder availability and implementing effective CPR development and management at the village level.

²Misra, Shefali and Ugo Pica-Ciamarra. 2008 - "Policies and Narratives in Indian Livestock, Good Practices for Propoor changes". CPF is a nationallevel NGO, based in Hyderabad Andhra Pradesh, working in the forestry sector since 1996, towards the employment and livelihood security of forest dependant communities. It has projects under implementation in Andhra Pradesh, Orissa and Jharkhand. Website: www.cpf.in

2. Context

2.1 Landless livestock rearers and fodder resources

The Livestock Census (2003) revealed that Andhra Pradesh has the second-largest population of small ruminants in India (21 million sheep and 6 million goats), and livestock rearing is emerging as a key livelihood activity for the rural poor over large parts of the state. A random survey of livelihoods conducted by CPF in 2003 in a sample of 680 Van Samrakshana Samitis (VSS)⁴ revealed that the situation is the same even among forest-dependent communities.

Livestock rearing, centred around small ruminants in particular, is a vital source of supplementary/alternative income especially for the very poor and for women-headed households. Trends reveal that even larger farmers and non-traditional livestock rearing communities are increasingly purchasing small ruminants not only as a risk mitigation strategy but also because it provides substantial supplementary income to support the high labour costs and often recurrent losses in agriculture. Rearers of small ruminants depend largely on CPRs and forest lands to meet fodder requirements.

However, the rapid depletion of CPRs due to urbanisation, development projects, land encroachments, government policies Figure 1: Trends in Livestock Population in Andhra Pradesh

pertaining to re-allocation and distribution of wastelands is leading to fodder scarcity. This is a major threat to the sustainability and continuation of small ruminant rearing as a livelihood activity. Fodder scarcity is experienced largely during the summer season when the population of small ruminants and migratory cattle increases significantly. This is because communities in the arid and semi-arid regions of the state Livestock population includes Cattle, Buffalo, Sheep and Goat generally take up small ruminant rearing as





work and labour opportunities in agriculture and allied jobs reduce after the harvesting of the rabi crop. The fringe forests and meagre CPRs provide up to 80% of the fodder



Type of Land taken into consideration here are land put to non-agricultural uses, permanent pastures, culturable waste and barren land. Source: Directorate of Economics and Statistics, GOAF

required for these resource poor communities. Statistics reveal that from 1966 to 2003, the livestock population (cattle, buffalo, sheep and goat) in Andhra Pradesh has increased by 54.01% (Figure 1). Incidentally, within the same span of four decades (between 1966 and 2005), a sharp decline of 9.12% is witnessed in lands used for grazing (Figure 2). This irreversible process approximately 200 to continues even today, gradually making forest land the prime source of fodder for landless, small ruminant keepers.

^₄Van Samrakshana Samitis, or Forest Protection Committees, formed through the World Bank-supported Joint Forest Manageent Programme in Andhra Pradesh, was initiated in 1996. Depending on the proximity of the village to the forest as well as the extent of forest area in the region, each VSS was allocated 500 ha of reserve forest land to use. manage and conserve. Refer to http://forest.ap.nic.in/ JFM%20CFM/JFMIN DEX.htm for more details on the project.

3. The Problem

In such an emerging situation, because forests support the livelihoods of large populations as well as cater to the needs of the state, the Andhra Pradesh Forest Department (APFD) commenced the implementation of the World Bank-supported Joint Forest Management (JFM) Programme in 1996. The purpose of the project was to conserve and revive degraded fringe forests to safeguard the livelihoods of the forest-dependent poor. This was envisaged by involving communities in the development and management of forests by forming VSS. Even though the programme was designed to cater to the needs of all forestdependent communities, it did not fulfil the needs of livestock rearers, particularly small ruminant rearers. The interventions by VSS then, and even now, are focused on regeneration and productivity enhancement, which puts a direct restriction on grazing. This took away yet another source of fodder for landless livestock rearers. In many areas, the VSS/Forest Department considered the large flock size of small and large ruminants a threat to the on-going forest conservation efforts. Due to this perception and the ban on grazing in VSS-managed forests, many livestock rearing families did not become VSS members in the initial phase of the JFM. However, in the subsequent Community Forest Management (CFM) phase initiated in 2002, field surveys and VSS membership records revealed that livestock rearers had become part of VSS committees. In some areas, village elders had negotiations/arrangements⁵ with migratory rearers, allowing conditional grazing in forests. Yet, wherever livestock rearing was a predominant source of livelihood, the management of the forests under the VSS was not very strong and a high level of conflict still exists between forest officials and other communities. On the other hand, where the VSS management was strong, the dependence on livestock was under check. Thus, a balance between the two is hard to find even today.

In addition, issues related to livestock, livelihood and natural resources fall under the purview of different line departments that have limited mechanisms for collective planning. The key fact that departments looking after livestock development have no control on land resources, and that departments owning and managing land resources have no direct connection with livestock, are often neglected. Further, the existence of strong conflicting perceptions of administrators on grazing-related issues, implementation of programmes and schemes with a single stakeholder focus, lack of a suitable mechanism to facilitate inter-departmental planning and policy development are other issues that compound the problem further.

⁵The most common arrangement is to allow grazing in areas where no taking place. Fines are levied on rearers if they are found grazing in treated areas. 61)Watershed Programme, 2) CFM Programme, 3) Andhra Pradesh Rural Livelihood Programme, 4) AP Drought Adaptation Initiative, 5)Indira Kranthi Patham, 6) National Rural Employment Guarantee Scheme Forestry Schemes, Mission Schemes etc.

Due to the above factors, several poverty alleviation programmes and NRM schemes⁶ that plantation activity is are being implemented in Andhra Pradesh, in spite of having high potential, seldom benefit landless livestock rearing communities. There has been no significant improvement in either access to fodder resources or grazing rights for landless livestock rearers although appropriate institutional structures to facilitate their involvement in management and the sustainable use of CPRs do exist, such as the sheep breeders' cooperative societies, VSS federations, NGO networks and elected *Panchayats* with direct authority over village grazing lands. This has also contributed to further strengthening the notion that livestock keepers are incapable of taking up fodder resource management effectively because practically all such projects and efforts, initiated so far, have either been discontinued or have demonstrated unsustainability. A few problems and conflicts that (NREGS), 7) social have resulted from the absence of collective and joint planning, and projects designed with 8) State Horticulture a single stakeholder focus are enumerated in Table 1.

Table 1: Differing Objectives of Different Line Departments resulting in inter-village and intra-village conflicts				
Department	Programme	Aim / Objective / Scheme / Programme	Type of Conflict/Result Triggered at the Village Level	Reason
Forest Department	JFM Programme, renamed as the CFM Programme in Phase II.	Regeneration and productivity enhancement of fringe forest land to safeguard the livelihoods of communities dependent/dwelling in forests.	Intra-village conflicts between livestock rearers and other communities. Reduction in the rearing of livestock. Increase in migration by livestock rearers in search of fodder. Loss of social and economic benefits for livestock rearers due to long migratory periods.	Ban on grazing in fringe forest areas.
			Inter-village conflicts. Loss of livelihood sources	Restriction on the use of forest resources by other villages after formation of VSS in one village and protection of forest lands.
			Inter-departmental /agency conflicts between the Forest and Animal Husbandry Departments and other agencies working for pastoralists. Conflict does not allow collective development of pro-poor policy for management of natural resources.	Ban on grazing in forests; absence of a grazing and fodder policy.
Rural Development	APRLP, Watershed Programmes, Indira Kranthi Patham, etc	Income generation through livestock rearing. Wasteland development through bio-diesel plantations.	Inter-community conflicts and increasing illegal entry into forests for fodder. Resultant conflicts and fines by Forest Department.	Increase in number of livestock at the village level and no visioning for fodder development. Further loss of grazing lands due to wasteland development activities.
Revenue Department	Redistribution of common lands for agriculture development and other uses.	Providing livelihood security to the landless rural poor through asset creation.	Inter-community conflicts between backward and scheduled castes	Loss of grazing and common lands due to conversion into agriculture land.

Table 1: Differing Objectives of Different Line Departments resulting in inter-village and intra-village conflicts				
Department	Programme	Aim / Objective / Scheme / Programme	Type of Conflict/Result Triggered at the Village Level	Reason
Animal Husbandry Department	Distribution of high milk- yielding buffaloes/cattle and small ruminants.	Income generation through animal husbandry.	Increasing debt because high investments required for fodder and livestock maintenance. Heavy loss in case of death of livestock. Increased desertification through grazing as some cross-bred sheep ⁷ eat away the root stalk of grasses.	Introduction of cross/exotic breeds of large ruminants in unsuitable regions to landless households inexperienced in raising 'high-maintenance' livestock. Promotion of cross-bred sheep in drought-prone areas.
NGOs and research agencies.	Promoting sustainable livelihoods.		Inter-stakeholder conflicts.	Activist- and rights-based approach. Limited use of MSP and systems approach.

⁷The Nellore Brown sheep are close grazers and eat the root stalks compared to the traditional Deccani breed that browse and do not eat the root stalks. Breeds such as the Deccani need, to be encouraged in drought-prone and degraded CPRs for grazing.

4.1 The Origin

Capitalisation of Livestock Programme Experiences India (CALPI), a programme of the Swiss Agency for Development and Cooperation (SDC) and Intercooperation (IC), sought to build on the rich experience of SDC-IC in India by strengthening the capacities of partners to influence the economic, administrative and legal framework in the livestock sector. As part of their capacity building efforts, CALPI along with ETC Netherlands (http://www.etc-international.org/) assessed the possibility of institutionalising a new research methodology called RAAKS in India. The aim was to use RAAKS as a potential means of identifying participatory ways of facilitating multistakeholder collaboration and networking that can positively influence the lives of poor and marginalised communities in India. In Phase 1, an orientation workshop was organised in August 2004 on RAAKS, and specifically on 'Pastoralists and their Access to Natural Resources'.

During this period, CPF approached SDC-IC/CALPI for funding support for a project called 'Balancing between Livestock, Environment and Livelihood in VSS and forest fringe villages'. As a logical next step, CALPI found the potential to apply the RAAKS methodology as the overall objective of this initiative, which was to facilitate convergence among the various stakeholders both at the village and at the department levels, towards improved livestock-based livelihoods and the sustainable use of natural resources.

CALPI was first invited by CPF to participate in a multi-stakeholder meeting being organised at the Panchayat level in Mydukur Mandal of Kadapa district before developing the implementation plan for the project. Representatives from NGOs, women's SHGs, Panchayati Raj Institutions (PRIs), watershed committees, VSS, Primary Sheep Breeders Cooperative Society (PSBCS), and village secretaries from three Panchayats (21 villages) participated in the meeting. The discussions clearly brought out the need for MSPs to build good governance and convergence in thought processes among different stakeholders both at the village and department levels. To achieve this objective, there was need to bring in equity and accountability among all concerned stakeholders, and ensure representation, transparency and participation. CALPI then introduced RAAKS—an MSP to enhance cooperation between conflicting stakeholders through problem resolution tools that would help concerned stakeholders define mutually acceptable solutions.

CPF used RAAKS during the field pilot project⁸ period in various ways to build linkages and enhance coordination between the stakeholders both at the village and the department levels. At a later stage, RAAKS was combined with Systems Thinking in collaboration with the Watershed Organisation Trust (WOTR), Maharashtra, to enhance results during field implementation.

4.2 Structure and actors involved

At the village level, the actor/stakeholders—the small and large ruminant rearers, VSS members, watershed committee members, women SHGs, Panchayat ward CALPI programme of members, and farmers-formed the Fodder Management Committee (FMC), which

⁸The RAAKS field pilot project in Kadapa district was SDC-IC.

dealt with the planning, development and management of fodder resources at the village level. Because several government programmes and schemes were under implementation through single-user groups, each stakeholder was responsible for mobilising funds from their respective programmes, in order to achieve the overall plan of increasing fodder availability at the village level. Having a multistakeholder committee at the village level is beneficial to access and utilise available funds for better livestockbased livelihoods.

At the secondary level, the actors/stakeholders involved were government officials from the Forest Department (FD), Animal Husbandry Department (AHD), Rural Development Department, Revenue Department and *Panchayati Raj* Department at the *Mandal* (block), District and State levels.

Systems Thinking is any process of estimating or inferring how local policies, actions or changes influence the state of the neighbouring universe. It is an approach to problem solving that views problems as parts of an overall system rather than reacting to present outcomes or events and potentially contributing to further development of the undesired issue or problem. It is a framework that is based on the belief that the component parts of a system can best be understood in the context of relationships with each other and with other systems, rather than in isolation. The only way to fully understand why a problem or element occurs and persists is to understand the part in relation to the whole. In contrast to Descartes' scientific reductionism and philosophical analysis. it proposes to view systems in a holistic manner. Consistent with systems philosophy, 'systems thinking' involves an understanding of a system by examining the linkages and interactions between the elements that compose the entirety of the system.

'Systems Thinking' attempts to illustrate that events are separated by distance and time and that small catalytic events can cause large changes in complex systems. Acknowledging that an improvement in one area of a system can adversely affect another area of the system, it promotes organizational communication at all levels in order to avoid the silo effect. 'Systems Thinking' techniques may be used to study any kind of system—natural, scientific, human or conceptual.



Figure 3 illustrates the linkages developed, the communication channels, and where and how RAAKS and Systems Thinking tools were applied.

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4.3 The Strategy

Based on the findings from the pre-project studies conducted by CPF, it became necessary to follow a Systems Thinking approach. So far, the stakeholders, at all levels, worked in isolation due to strong conflicting perceptions and limited mechanisms of planning or implementing work in collaboration. This situation had an adverse impact on resource-poor livestock keepers.



Figure 4 illustrates the four major issues in livestock-based livelihoods, which lead to increased desertification, rendering this livelihood occupation unsustainable in the long run. The diagram further depicts the key factors that cause these major issues at the village level and the relevant government department, under the purview of which it falls. The analysis implies that all these issues need to be addressed simultaneously by engaging and involving concerned stakeholders both at the village and department levels.

To achieve project objectives, the RAAKS methodology was used to address conflict and facilitate collaboration between concerned stakeholders, both at the village level and among the concerned line departments rather than as a decision-support tool. Past experience and learning has revealed that merely having workshops and meetings is not adequate to facilitate convergence; the RAAKS process here was supported by a live field-based pilot project, which implemented all emerging strategies.

RAAKS was designed to bring out social learning issues relevant to innovations as well as to design strategies for improving communication between stakeholders in a certain sector or system. RAAKS tools⁹ were used in different ways and levels in the project—for problem analysis, project planning and workshops/training for multiple stakeholder

[°]RAAKS has tools in three windows, Window 1 deals with problem definition and system identification; Window 2 deals with analysis of constraints and opportunities; and Window 3 deals with action plannind.



platforms because it emerged from the perception that 'there is always room for improvement' in the performance of systems.

Figure 5: Systems Map

At the village level, RAAKS was used for 'defining the problem and system identification'

(Figure 4 and 5). It helped bring out a clear problem statement, a shared vision with a sound strategy and an implementation plan that was agreeable to different stakeholders. (Refer to Figure 6 in section 4.4)

The systems map (Figure 5) also brought out the fact that the main issues faced by the communities rearing livestock clearly fall under the purview of different line departments or are linked to other communities at the village level. Hence, working with the focus on a single stakeholder would not lead to the desired results.

At the secondary stakeholder level, the RAAKS approach was used for two distinct purposes and implemented in two phases. In Phase 1, the approach helped all stakeholders to The use of these different tools appropriately in multistakeholder groups *results* in:

- *A clearer picture of the goal of the system (shared vision).
- *Better understanding of what each other's roles and tasks are in the system and what changes are needed in achieving synergy, in order to improve the performance of the system.
- *A more 'people centred' way of working, improvement in relationships, and, therefore, the way people work together (more efficient and effective).
- *Improved communications because people from various institutes and departments will get to know each other better (institutes are personalised).
- *Well-designed and widely supported interventions geared to improving the performance of the system.
- *Establishment of informal networks.
- *Finally, improved performance of the system.

identify the root causes for the current situation of livestock-based livelihoods, understand each other's perceptions and identify possibilities of collaboration. It also created awareness about the system in which livestock keepers operate and sensitise all stakeholders on issues faced by landless livestock keepers. In Phase 2, the approach was used to facilitate convergence commencing with collaborative planning and implementation between the stakeholders at the government level.

The first RAAKS workshop was organised by CPF at the Andhra Pradesh Forest Academy in July 2005. The participating stakeholders were officials from the Forest, Rural Development, Animal Husbandry, Revenue, and Panchayati Raj departments, NGOs, Research and Educational Institutions. The workshop also organised a field visit to Kadapa district where the participants got a chance to interact with primary stakeholders directly. The workshop resulted in redefining the problem from conflict between VSS groups and livestock rearers to scarcity of fodder for livestock rearers. The constant review of the problem definition both in homogenous and heterogeneous stakeholder groups brought out the fact that conflicting actors/stakeholders actually agreed on some issues. Lack of convergence between concerned stakeholders was identified as the root cause of problems in the system. The workshop not only highlighted the shortcomings but also the strengths within the system and the points for convergence and networking became clear. The use of the tools, group discussions and presentations shifted the focus from what was not functioning well in the system towards what is functioning well and what could function better if people work pro-actively together. For project implementers, it brought an understanding of the synergy among the stakeholders, particularly the field officials of the Forest, Revenue, Rural Development and Animal Husbandry departments. The RAAKS approach also brought in a clear understanding among participating stakeholders on how to improve efficiency and effectiveness within their own programmes because the results were clearly evident in the live field pilot project.

Phase 2: Even though good results were seen in the field pilot project, the RAAKS approach could not motivate secondary stakeholders to plan and work beyond their sectoral and temporal boundaries¹⁰. The major role of coordination still lay with CPF and the local NGO. This was due to restricted mandates, design and implementation of timebound programmes centred on specific departments with no opportunities of commission as it convergence with other departments, limited understanding on why operational processes are structured as they are, how the system is inflexible to change, etc. In view of this, in the second phase of training, the RAAKS methodology was combined with Systems Thinking concepts. RAAKS tools enhanced situation analysis, linkage development and implementation skills whereas Systems Thinking helped implementers to understand the structure better, why it operates the way it does and how to deal with it, thereby allowing consensus-based strategic planning. Including Systems Thinking concepts with the RAAKS approach was taken up with the objectives of:

*Sensitising concerned stakeholders on the need to operate beyond their temporal and sectoral boundaries, in spite of their projects being time-bound and having confined mandates.

*Introducing tools that help stakeholders identify high leverage points to promote collaboration when planning and implementing.

*Facilitating planning with a holistic approach.

boundary denotes a time limit in which a system/ stakeholder needs to operate Some examples are: the temporal boundary of a watershed programme is five years; so also for the planning develops the fiveyear plans. In the stakeholder context, the temporal boundary of an officer implementing the watershed programme would be one year (annual budget). However, even though the concerned actors/ stakeholders/ system needs to operate in a given temporal boundary, in order to plan realistically, there is need and benefit in thinking and operating beyond this.

¹⁰Temporal

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With these objectives, a second RAAKS workshop was organised in April 2008. The problem statements and rich picture diagrams developed by homogenous stakeholder groups were analysed in heterogeneous stakeholder groups and clearly reflected new linkages and solutions rather than relying on reactive or habitual responses. This could be attributed to the change in mind-sets and a willingness to understand the perspectives and views of other stakeholders. Introducing the concepts of events, patterns and how a system operates among different stakeholders facing a similar problem provided clarity on the need for a holistic approach for planning and implementing interventions for balancing livestock, livelihoods and the environment. Understanding system archetypes stimulated the participants to think beyond sectoral boundaries (see the full picture), identify solutions and problems that result from working in isolation. Finally, the training helped stakeholders understand the current reality from multiple perspectives, thus creating a shared vision.

4.4 Outcomes

The field pilot project was implemented in Thuvapalli Panchayat, Mydukur Mandal, Kadapa district where the strategies discussed in the RAAKS workshops were implemented with secondary stakeholder participation. To achieve the objective, processes were followed at village, district and state levels to develop suitable mechanisms for balancing livestock-based livelihoods and the sustainable use of natural resources (See Figure 3 and Figure 6). The RAAKS workshops/training equipped the concerned stakeholders, namely, government line department officers, NGOs, CBOs from the same district, with participatory, joint analysis and action planning skills to work in multi-stakeholder conflict situations. The



results in the field pilot project were encouraging.

The field results enhanced coordination and collaboration among all stakeholders. Achievements in the field during Phase 2 of the project (June 2006 to July 2008) are as follows:

1. Accessing APREGS Funds for Pasture Land Development: With facilitation support from CPF and CHRD, the partner NGO, Rs 2,881,710 was mobilised for several activities in Thuvapalli *Panchayat* to develop 300 acres of pasture land and simultaneously create employment for over 400 villagers in the *Panchayat*. These activities included:

*Using the APREGS to develop pasture plots, built ownership among the communities to protect the land and negotiate terms of use with migratory livestock keepers because they were aware of the investments made.

*Taking up soil and moisture conservation works in time (before the onset of the monsoon) increased the survival and output of grass and fodder trees planted on the wastelands.

This considerably motivated communities and encouraged them to take their work further. (For more details, see Table 2).

Table 2: Activities undertaken for Pasture Land Development			
Components utilised from APREGS (NREGA) to develop pasture plots	Area covered	Funds utilised (Rs)	Status
Staggered trenching to retain water on pasture plots.	Approximately 300 acres in plots identified in 7 hamlets.	1,939,568	Completed
Subabool nursery	1 nursery	27,642	Established
Farm pond		30,000	Sanctioned
Jungle clearance		84,500	Completed
Removal of stumps	In pasture plots in Jandlavaram village	90,000	Completed
Construction of feeder channels		300,000	Completed
Horticulture plantation (agro- forestry on private lands	90 acres in Katakindapalli village	410,000	Completed for year one—2007
Barren hill forestation			Proposal submitted, but not followed up due to project
Block plantation			closure

2. Fodder production on private agricultural land through Agro-forestry: The concept of agro-forestry (horti-pasture model) was introduced in collaboration with CRIDA and was extensively promoted among farmers, who had large ruminants and owned land. Further, to increase interest in this, a link-up was made with the horticulture mission scheme for supply of high-quality fruit trees and continued technical back-up support for a period of two years along with APREGS for land-development costs. Farmers were encouraged to plant fodder within the fruit orchards. The project supported 60 farmers (covering 90 acres) in Katakindapalli village under this scheme.

3. Cultivation of fodder slips and a buy-back arrangement with AHD: An MoU was also signed with the AHD to grow CO-3 (Hybrid Napier) slips, which would be bought back by AHD. This also encouraged many farmers to plant fodder on their own lands. At the start

Table 3: Cultivation of Fodder on Private Agricultural Lands			
Village	No. of Farmers with CO-3 Fodder Plots	Area under CO-3 (in cents)	Farmers with Subabool as Boundary Plantation
Jandlavaram S.T. Colony	8	80	5
Jandlavaram S.C. Colony	12	150	7
Basavapuram Main	13	159	0
Jandlavaram Main	8	107	3
Basavapuram S.C. Colony	3	60	3
Thuvvapalli S.T. Colony	8	136	4
Thuvvapalli Main	9	230	5
Katakindapally	18	470	3
Total	79	1,492	30

of this activity, only three farmers in the *Panchayat* cultivated fodder for their large ruminants; this eventually increased to 79 farmers in predominantly ST and SC hamlets by the end of the project. Many of these farmers have allocated a few cents¹¹ of land to growing fodder for sale and to meet their own fodder needs. This helped in creating a separate source of fodder for large ruminant rearers, creating space in CPRs and forest lands to meet the fodder requirement of landless livestock rearers.

4. Efforts to increase preventive health care for animals: On account of the high mortality rate among small ruminants, continuing the field project had become difficult because every interaction with the community brought out problems related to animal health. To maintain the interest of livestock keepers on fodder development activities, an additional

responsibility of facilitating preventive health care was also given to the FMC members. With the help of the AHD and the District Water Management Agency (DWMA), a number of animal health programmes were organised during the project period (See Table 4).

Table 4: Animal Health Programmes			
Department	Months	Details	
AHD	July and December 2007	De-worming Programme in four villages	
AHD	October 2007	Animal Insurance Programme	
AHD & DWMA	February 2008	Fertility Camp	
AHD	2008	Health Camp with the Gopalamitra programme	
AHD	2007	Training on maintenance for both small and large ruminants	
DWMA	2007	Medicines supplied through the productivity enhancement scheme	

¹¹1 cent = 435.59 sq ft (40.468 m²) or 1 acre = 100 cents

5. Sustainability of the Approach

This good practice effectively showcases that in the present-day scenario, working on issues related to livestock in isolation will not lead to the desired results. A systems approach to deal with the issues of livestock and CPR development and management in a holistic manner is a possible way forward. The pilot project not only sensitised and reduced conflict among stakeholders but also resulted in accessing and effectively using existing government schemes for livestock development within a short time.

As the results of using existing opportunities (government schemes) became more visible in the ongoing field pilot project, it became easier to bring together policy makers, particularly from the Departments of Forest, Animal Husbandry and Rural Development, on the same platform to initiate a dialogue for suitable and convergent policy development. This was quite evident in the number of officials, who participated in the multi-stakeholder workshop held in July 2007¹². During the workshop, district-level officials from the Forest and Rural Development Departments also expressed interest in replicating a similar model of fodder development and management in other forest divisions where an overlap with watershed programmes existed, using internal departmental funds and technical and facilitation support from CPF and its partner NGOs.

Addressing policy change is a long and slow process; therefore, other ways of optimally utilising existing opportunities, were looked into. A training manual was developed on RAAKS and the Systems Thinking approach to balancing livestock-based livelihoods, NRM and development, which could be used by government training academies, ensuring continuity in some form. The methodologies were field-tested twice, with the involvement of senior officials from the concerned line departments. Together with the results in the field pilot project, training more officers on such methodologies was readily accepted.

5.1 Lessons Learnt and Key Elements for Success

The advantages of participatory research methodologies and adopting a multi–stakeholder approach are:

*Using participatory methodologies (RAAKS and Systems Thinking) to facilitate convergence and develop plans and strategies in training/workshop mode, together with field visits, added more value. This proved to be more effective than the regular meeting and consultations approach. Care was also taken that the concerned stakeholders (community members, NGOs and government officials) participating in the workshop/training were from the same region where the field pilot project was being implemented. This strategy not only built understanding regarding ground realities but also strengthened linkages between stakeholders thereby contributing to faster implementation of government schemes.

*Use of participatory methodologies also helped the implementing agency (CPF) to analyse project observations and anticipate possible setbacks and outcomes ahead of time. This also helped in planning for appropriate mid-course corrections during project implementation thereby ensuring smooth progress and bringing in the desired results faster.

*At the Community level:

Using select RAAKS tools, with different stakeholders at the village level, helped identify the problem statement common to all. It made communities realise that regeneration and

¹²The workshop was jointly organised by CPF. IC. AP Forest Academy and Departments of Forest, Rural Development and Animal Husbandry. The deliberations were on developing strategies to restore the balance between livestock-based livelihoods and the sustainable use of natural resources. Special emphasis was on small ruminant rearing, fodder security, policy and practices with regard to CPRs, and grazing and fodder in Andhra Pradesh. More information on the proceedings of this workshop are available at CPF.

management of fodder resources are the concerns and duty of all and not only the livestock rearers. This resulted in the formation of a multi-stakeholder committee at the village level to look at fodder-related issues. Because various NRM-based programmes were being implemented at the village level simultaneously and through single-user groups, the formation of a multi-stakeholder group at the village level facilitated collective planning and the possibility of accessing funds from existing programmes to achieve their common goal faster.

Small ruminant rearing does not allow the rearers to take the complete responsibility of CPR management owing to the need for migration to meet livestock grazing needs. Working in a multi-stakeholder group helped non-livestock rearing communities understand the problems and priorities of small ruminant rearers.

*At the Departmental level:

Introducing participatory tools that help in analysis and facilitate working together to solve problems in the workshop mode induced interest among government field officials, communities and NGOs. As the participants were from the same area where the field pilot project was being implemented, identifying, planning and accessing funds from appropriate schemes was made possible, contributing to faster and smoother field implementation. Communication between the coordinating NGOs and their involvement at the field level also increased considerably.

Involving higher officials of different departments (Forest, Animal Husbandry and Rural Development) on the last day of the training programme in the RAAKS and Systems Thinking workshops helped clear perceptions and build relationships. The issuing of necessary circulars to district officials took place faster. Government circulars issued from the head office made implementation at the district level easier.

Officials of all concerned departments (at the state, district, mandal and village levels) were being informed on the aspects and developments in the field pilot project. Simultaneously, gaps in the system could be reduced drastically.

The results in the field pilot project as well as the interest expressed by senior officials during the multi-stakeholder state level workshop in 2007 triggered interest among district-level officers of the Forest and Rural Development Departments to replicate similar models of fodder development in their forest divisions whereby there was an overlap with watershed programmes. CPF was asked to provide technical and facilitation support to projects, with funding support for field-level activities from the respective departments.

5.2 Scope for Replication

Observing the impact of this approach and the extent of government funding accessed for livestock development, largely from existing schemes and programmes, applying a systems approach, working with multi-stakeholder platforms and the use of participatory research methodologies are practices worthy of replication. It showcased the effectiveness of building consensus between multiple stakeholders, at the primary and secondary levels, in increasing fodder availability and implementing effective CPR management at the village level. This contributed to balancing livestock-based livelihoods, and the conservation of natural resources.

Based on this initial implementation of the RAAKS methodology and the positive results obtained, the CPF expanded its intervention to Mahabubnagar district of Andhra Pradesh, in collaboration with its partner NGO-Conservation of Natural Resources through Rural Awakening (CONARE). Soil and water conservation interventions were undertaken on village grazing lands and wastelands of five Panchayats of the Achampet Mandal, following which suitable rainfed varieties of fodder were planted on these lands. In addition, farmers were also supported in the planting of fodder on private agricultural lands. A stakeholder consultation meeting was convened on 9 April 2010 at the office of the Divisional Forest Officer, with representation from the Departments of Forests, Animal Husbandry and Agriculture the Integrated Tribal Development Agency; NABARD; Panchayat representatives from Mahabubnagar and Kadapa districts, and local NGOs. The focus of the meeting was on approaches for fodder development and management for securing livestock-based livelihoods (See Annexure 3: Executive Summary of the Stakeholder Consultation on Fodder Development and Management for Securing Livestock-based Livelihoods). The stakeholder consultation resulted in the formulation of a joint resolution regarding the use of NREGS funds for fodder development in forest fringe villages.

Following this, the CPF has initiated a pilot project in ten villages of Lingal and Balmur *Mandals* in Mahabubnagar district, for the production of quality fodder seed and fodder grass slips. The pilot project, funded by NABARD, is expected to increase the availability of quality fodder seed and grass in the area, and motivate communities to plant fodder on both private agricultural lands and village common lands thereby increasing the availability of fodder and securing the livelihoods of livestock-dependent communities.

Annexure 1: Tools of RAAKS



C1 Knowledge Management Analysis What can the Actors do to improve the System?

C2 Actor Potential Analysis Who can do what? Who has the mandate to cooperate?

C3 Strategic Commitment to Action Plan (Planning) Who does what, when and how?

Annexure 2: Perceptions of Concerned Line Departments on Grazing and Related Issues

Excerpts from multi-stakeholder consultations organised by CPF in collaboration with the Departments of Forests, Rural Development and Animal Husbandry in 2007

The National Forest Policy 1988 (section 4.8.3), the National Forestry Commission 2006 and the National Commission on Agriculture Report (Volume IX Section 11 Para 42.11.1) advocate regulated grazing in forests with the help of communities. In view of this, the *Forest Department* believes there is a need for a suitable and comprehensive grazing policy, in the interest of communities dependent on livestock for their livelihood. This is because if the situation of unmanaged grazing continues unabated; there is imminent danger of all the fodder species disappearing from the forests and CPRs, putting the very survival of livestock-based rural livelihoods and the pastoral economy in jeopardy. It states that "prolonged or un-managed" grazing in fringe forests has allowed retrogressive ecological succession to set in. The good palatable fodder species, thus, are being overtaken or replaced with less palatable and low-nutritive fodder species and weeds in these forest areas rapidly. This also adversely affects the regeneration capacity of forests. However, they also state that forests in Andhra Pradesh do have the potential to meet the fodder requirements of poor livestock keepers and, hence, a proper resource management system needs to be in place. This is because grazing is very necessary for the survival of certain palatable flora in the forest ecosystems. Given this interdependence between grazing and sustained productivity of CPRs, including forests, it is essential that a suitable and community friendly fodder resource management system is in place to enable effective grazing and reverse retrogressive ecological succession thereby safeguarding both livestock-based livelihoods and the sustainability of the forest ecosystem.

The *Rural Development Department* too believes that managed grazing is necessary and relevant for projects implemented by other departments because experience has shown that plantations taken up in wastelands have always been a failure, and funds allocated for such activities are often left unutilised due to this.

The <u>Animal Husbandry Department</u>, pastoralist forums and agencies working for the development of pastoralists believe that forests are a surplus source of fodder and that pastoralists have knowledge of how to manage the resource. Hence, there is no need for a grazing policy because this would adversely impact the livelihoods of the poor livestock rearers.

The *<u>Revenue Department</u>* on the other hand, places more emphasis on the redistribution of common lands/wastelands for agriculture rather than preserving them for grazing because it is more beneficial for the poor.

Annexure 3

Stakeholder Consultation on Fodder Development and Management towards Sustaining Livestock-based Livelihoods-9th April 2010

Office of the Divisional Forest Officer, Achampet Mandal,

District Mahabubnagar, Andhra Pradesh

Executive Summary

Nirakar Pradhan and Dr. D. Suryakumari

The stakeholder consultation on fodder development and management towards sustaining livestock-based livelihoods was held on 9 April 2010 in Achampet at the office of the Divisional Forest Officer. The meeting, jointly organised by the Centre for People's Forestry (CPF) and Conservation of Natural Resources through Rural Awakening (CONARE) and supported by Oxfam India and the Andhra Pradesh Forest Department, focused in particular on addressing fodder security in Mahabubnagar district.

Approximately 110 participants attended the day-long consultation, representing district-level officials from the Departments of Forest, Animal Husbandry, Agriculture; the Integrated Tribal Development Agency; NABARD; state- and local-level NGOs working on similar subjects; Vanasamakhya; and community and *Panchayat* representatives from the Mahabubnagar and Kadapa districts.

The meeting commenced with a briefing by Dr. Suryakumari, Director, CPF, wherein she elaborated on the background and purpose of the meeting, and the need to create and sustain the base for fodder development. She also informed the participants of the results of the work on fodder development, undertaken in the Kadapa and Mahabubnagar districts, by CPF, in collaboration with partner NGOs.

The first half of the day was devoted to experience sharing by participants. Some of the key issues raised were:

- 1. Distress selling of livestock is high because people do not have money to feed livestock during the summer season.
- 2. The district receives low rainfall; there is, therefore, limited scope for the promotion of irrigated fodder and hybrid fodder varieties.
- 3. Community lands/grazing lands are increasingly being encroached or distributed for other infrastructure/development projects.
- 4. With the decrease in livestock population, there is decline in the availability and use of farmyard manure and increasing dependence on externally purchased chemical fertilisers.
- 5. While NREGS is providing employment to the rural poor, and the government is also contemplating a food security bill, there is apparently little focus on policy development to support livestock rearers.
- 6. Livestock rearing is a key livelihood activity, particularly in the tribal regions, where almost 70 to 80% of the community depends on livestock rearing. Tribal communities, including women and children, often have to migrate during the summer in search of fodder for their livestock. If fodder resources could be secured closer to their habitation, the need to migrate could be reduced, facilitating more settled livelihoods and access to education for tribal children.
- 7. Commercial cropping and mechanisation in agriculture further reduce the availability of fodder. In the summer, dry fodder is available at exorbitant rates, beyond the purchasing capacity of livestock rearers.

The second half of the day focused on possible solutions and suggestions for addressing the issues raised. Some of the suggestions that emerged are as follows:

- 1. Massive awareness is required at different levels such as on the need to cultivate fodder (as against taking for granted that it is a perennial resource, available in abundance in forests), animal diseases, vaccinations and the existing government schemes for fodder development.
- 2. The Animal Husbandry department should take the lead in identifying grazing lands and providing support to develop and maintain fodder in these lands.
- 3. The community should be oriented on livestock-based economics and, in particular, on the numerous products that are obtained from livestock. Such orientation will improve the morale of livestock rearers.
- 4. Water facilities should be created in grazing lands for fodder development through various government schemes such as watershed development and NREGS. In summer, the tank bed can be effectively used to grow short-term fodder varieties.
- 5. Communities should allocate at least 10% of their agricultural land for fodder development.
- 6. Line departments should work in close coordination with the community to address these issues.
- 7. The *Mandal Mahila Samakhya*/Village Organisations (VOs) can take up these issues and work on them with support from the Animal Husbandry department.
- 8. The VSS/Eco Development Committees should pro-actively respond and take up initiatives for fodder generation because it will result in forest conservation and protection. The Forest Department should provide the required support and technical advice, including funds from NREGS.
- 9. CPF should consider expanding such initiatives and facilitate mainstreaming of collaborative arrangements.

Shri Ashok Kumar, Special Agriculture Officer, ITDA, shared information regarding alternative fodder crops to boost milk production. Azolla can be grown in paddy fields and water bodies, and fed to livestock to increase milk production. In addition, gherkins can be fed to milch animals to increase milk production. Similarly, *jowar*, maize and *bajra* can be grown in agriculture fields. These crops are excellent sources of fodder as also sources of highly nutritious grain.

Dr. Ramchandar, Joint Director, Department of Animal Husbandry, Mahabubnagar, shared information on district livestock statistics (Sheep: 41 lakhs, Goat: 6.8 lakhs, Buffalo: 5 lakhs, Cows: 8 lakhs), and various livestock-related schemes. He said that the district has the highest population of livestock in the state. While the district has a large number of nondescript livestock, the number of hybrid cows and buffaloes are hardly 1.5 lakhs. He added that fodder supply was the lowest from January to July each year. This period is characterised by high migration of livestock rearers in search of fodder. In the district, over 30 lakh sheep migrate each year. He spoke of various measures to improve livestock productivity such as artificial insemination, rearing high productive animals, taking advantage of existing government schemes related to fodder development, adopting models such as horti-pasture, silvi-pasture and mixed cropping. He expressed concern over increasing farm mechanisation, mechanical crop harvesting and putting fire to crop residue, which adversely affected the availability of dry fodder.

Some participants asked Dr. Ramchandar questions related to wasteland allocation to sheep rearers' cooperatives, increasing land acquisition by influential people, awareness programmes for small and marginal farmers and availability of fodder seed, and vaccine for landless livestock rearers.

Shri Pramod Kumar, Divisional Forest Officer of the Achampet Forest Division, proposed the idea of taking up fodder development and management programmes in forest fringe areas, in view of the fast depleting forest resources. For forest conservation and to ensure the continued supply of fodder, the community has to play a critical role. He said that if the community is

willing, he would explore the possibility of mobilising funds from NREGS for the proposed programme. He suggested that in forest fringe areas, the VSS and Eco Development Committee (EDC) could undertake the programme and, in non-forest areas, fodder can be grown in tank beds and grazing lands.

Shri Suresh, Assistant General Manager (District Development), NABARD, informed that NABARD has initiated a seed development programme for agriculture/food crops, and that, in some clusters, a fodder seed development programme could be initiated on a pilot basis. He also provided a road map on how such an intervention could be implemented.

The stakeholder consultation ended with a summary of the major points discussed by Dr. D. Suryakumari.

Commitments

Forest Department

1. Interested in involving EDC and VSS for fodder development and management.

2. Interested in developing forest fringe areas for fodder development, using NREGS funds.

Animal Husbandry Department

1. Ready to supply any quantity of fodder seed and vaccines

2. Willing to work in collaborative mode with other line departments

NABARD

1. Willing to fund a village fodder seed development programme in 2–3 clusters on a pilot basis (initially 10–20 villages) if CPF puts up a proposal and the Forest Department is willing to collaborate.

2. Willing to scale up successful models at the district level subsequently.

Joint Resolutions

1. NREGS funds can be utilised to develop fodder nurseries in forest fringe areas.

2. NREGS funds can be utilised for fodder development in forest fringe villages.

3. NREGS funds can be used to cut and carry grass from forests during the summer months and, where required, fodder depots can be established to distribute fodder grass for a price.

Participants Profile	
Forest Department	1
Animal Husbandry Department	2
Agriculture Department	1
Integrated Tribal Development Agency	1
State/Local NGO Representatives	34
Community Representatives (Ratio-Female:Male)	65 (17:48)
Centre for People's Forestry	4
Local Vanasamakhya Representatives	2
Total (Ratio-Female:Male)	110 (22:88)

List of Abbreviations

AHD	Animal Husbandry Department
AP	Andhra Pradesh
APREGS	Andhra Pradesh Rural Employment Guarantee Scheme
CALPI	Capitalisation of Livestock Programme Experiences India
СВО	Community Based Organisation
CFM	Community Forest Management
CHRD	Centre for Human Resources Development
CPF	Centre for People's Forestry
CPRs	Common Property Resources
CRIDA	Central Research Institute for Dryland Agriculture
DWMA	District Watershed Management Agency
FD	Forest Department
FMC	Fodder Management Committee
IC	Intercooperation
IKP	Indira Kranthi Patham
JFM	Joint Forest Management
MSP	Multi-Stakeholder Processes
NGO	Non-Government Organisation
NRM	Natural Resource Management
PRI	Panchayati Raj Institutions
PSBCS	Primary Sheep Breeders Cooperative Society
RAAKS	Rapid Appraisal of Agriculture Knowledge Systems
SC	Schedule Caste
SDC	Swiss Agency for Development & Cooperation
ST	Scheduled Tribe
VSS	Vana Samrakshana Samitis
WOTR	Watershed Organisation Trust
WSHGs	Women Self Help Groups

References

Directorate of Economics & Statistics, GOAP " Compendium of Area and Land Use Statistics of Andhra Pradesh" 1955-56 to 2004-05

Earth Summit (2002) Introduction to Multi-Stakeholder Processes. Available at: http://www.earthsummit2002.org/msp/index.htm#Introduction (12.1.2008)

K. Bhavana Rao and C. Sivasankara Reddy, IFS - Effective fodder resource management – Balancing livestock-based livelihoods and forest ecosystems in Andhra Pradesh - Paper presented at 4th International Conference on Environment Education under "Role of Livestock in Sustainable Development . A South-South Consultation organized by CEE at Ahmedabad during Nov 2007.

Livelihood Survey data in 680 VSS – CPF 2003

Livestock census records 1966 to 2003, GOAP.

Marieke Kool, University of Twente - Enschede and Center for People's Forestry AP, India, 2004 Study on "Roles of different departments and village level institutions in Kadapa district (AP, India)

Multi-stakeholder workshop report "Restoring Balance between Livestock based Livelihood and natural Resources" July 2007, published by Centre for People's Forestry, Hyderabad, Andhra Pradesh.

Ostrom, E (1999) Self-Governance and Forest Resources. Occasional Paper No. 20; CIFOR

"Striking a balance" - CPF's experiences on bringing-in convergence towards improved livestock-based livelihoods & use of natural resources . Centre for People's Forestry , July 2008

The National Forest Policy 1988

The National Forestry Commission 2006

The National Commission on Agriculture report 1967

The RAAKS resource box, Paul G.T. Engel and M.L. Salomon. Royal Tropical Institute, Amsterdam, The Netherlands. 1997

Wollenberg, E. Edmunds, D. and Anderson, J. (2001) Editorial. International Journal of Agriculture, Resources, Governance and Ecology (IJARGE); Special Issue on accommodating multiple interests in local forest management, Volume 1, Nos. 3/4, pp. 193-198.

The NDDB-FAO **South Asia Pro-Poor Livestock Policy Programme** (SA-PPLPP) SA PPLPP is a unique livestock development program that aims to 'to ensure that the interests of poor livestock keepers are reflected in national as well as international policies and programs affecting their livelihoods'. It endeavors to do so by a) creating spaces for and facilitating dialogue among the actors playing a direct and indirect role in the livestock sector of South Asia, and b) drawing from and using lessons from field experiences to influence livestock-related policies, programmatic and institutional changes towards the benefit of poor fe/male livestock keepers in the region.

To access SA PPLPP publications and other information resources, please visit our website at http://www.sapplpp.org

The **Centre for People's Forestry** is a national level NGO with its headquarters in Hyderabad, Andhra Pradesh. CPF's Mission is Promoting capacities, diversifying skills and enhancing livelihood security of the marginalised sections among forest dwelling and dependent communities. CPF believes that the claim to conservation, control and management of forest resources belong to the forest dependant/dwelling communities and their livelihoods should be the primary concern of all forestry programmes.

For more information kindly visit their website at www.cpf.in

Intercooperation is a Swiss Foundation for development and international cooperation working in 20 countries including India. In India it has been working since 1982, as a project management and implementation partner of the Swiss Agency for Development and Cooperation, SDC. Now, Intercooperation works with governments, technical and research organisations, NGOs and Community Based Organisations (CBOs) on initiatives in natural resource management for sustainable livelihoods.

For more information visit www.intercooperation.org.in

CALPI (Capitalisation of Livestock Programme Experiences India) was initiated by the Swiss Agency for Development and Cooperation (SDC) in January 2003, with the objective of capitalizing and sharing the significant experience of SDC in the livestock sector, and based on this experience facilitating change in the policy framework towards the needs and priorities of the rural poor. CALPI was implemented by Intercooperation, and focused on seven priority areas in the livestock sector – policy development, service delivery, veterinary and animal husbandry education, livestock-environment interaction, facilitating knowledge, network and research partnerships, human and institutional development and the marketing of livestock products. Phase I of CALPI concluded in July 2006.

(Source: CALPI Fact Sheet, CALPI Phase End Report, www.intercooperation.org.in/livestockexperiences.html)

Watershed Organisation Trust (WOTR), India is an NGO established in 1993 to undertake holistic and integrated developmental activities for poverty reduction in resource-fragile and rainfed areas in India. WOTR started work in India by developing the capacities of various stakeholders for the Indo-German Watershed Development Program. It believes that land degradation and water scarcity are the most intense and commonly felt needs of a village community that can bring different groups of people together to begin their development process. Community restoration of the natural environment makes sustainability happen. Such community-led efforts help combat and adapt to climate change and mitigate the impacts.

For more information visit www.wotr.org

About this Good Practice

Against a rapidly changing external environment, livestock rearing, particularly by small-holders, and the management of common property resources including forests cannot be dealt with in isolation. As multiple interest groups use and manage the same natural resource base there is a need to better understand the linkages and frameworks in which they operate. This good practice note highlights the need for greater interaction and collaboration between different stake-holders dependent on the same natural resource base and responsible for its development and management. The Note details how a multi stakeholder process (MSP) called RAAKS – Rapid Appraisal of Agriculture Knowledge Systems – was developed and implemented for the management of common property resources, including the establishment of collaborative arrangements between community representatives, PRIs and line departments such as Forests, Animal Husbandry and Rural Development, in a pilot project in District Kadapa, Andhra Pradesh, India.

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