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Drawing Policies, Programs & Institutional Lessons out of Good Practices: "Common Property Resources - Livestock"

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DRAWING POLICIES, PROGRAMS AND INSTITUTIONAL LESSONS OUT OF GOOD PRACTICES[1] 'COMMON PROPERTY RESOURCES - LIVESTOCK'

1) Introduction

There is evidence that Common Property Resources (CPRs) have been declining and degrading since the 1950s in South Asia, thereby constraining the livelihood options of a large share of the poor livestock-rearing households for whom CPRs are a major source of fodder and water for livestock, as well as of food, fuel-wood, and medicinal plants. The worst is that poverty is exacerbated while at the same time valuable resources are turning unproductive in a sub-continent where productive land is scarce.

This brief builds upon a number of Good Practices (GPs) on CPRs-livestock collated by the South Asia Pro-Poor Livestock Policy Programme[2]. GPs are concrete cases where CPRs are efficiently and equitably managed for the benefit of the livestock-dependent poor. It aims to show that investing in CPRs is not only good for the livestock dependent poor, but it is also good economics and good policy; and draws some lessons for the design of policies, programmes and institutions supporting CPR development.

2) Livestock-CPRs are good for the poor

Regeneration and sustainable management of CPRs can contribute to increased benefit for the livestock-dependent poor, as shown by quantitative and qualitative indicators both at household and community level. For instance, evidence from Rajasthan indicates that households derive fodder valuing almost Rs. 11,000 per annum from regenerated CPRs; or that small and marginal farmers have significantly increased the number and type of their farm animals.
Decentralized, collective and sound management of CPRs-livestock leads to three major impacts[3], which are recurrent throughout all GPs.

[1] **Based on three (draft) Good Practices (notes/study):**
- **INGP31** Degraded Community Land converted in to Valuable Assets by Village Community in Kalvas – District Bilwara, State Rajasthan
- **SAGP13** Securing Community Tenure over Common Lands – District: Shajapur, State: Madhya Pradesh

[2] SA PPLPP's interest in identifying and documenting Good Practices in managing CPR is **threefold** namely:
i. arriving at **concrete evidence** that investing in development and management of CPR in a holistic manner can be an effective and efficient means to contribute to poverty reduction[2];
ii. **to anticipate current strength of the livestock sector** in South Asia which is not in direct competition with agriculture (non-grain based systems; non-planted fodder systems) but **synergetic** (integration of animals in crop, food and forest production systems) **and/or pastoralism oriented**; it is about the relative extensive systems of keeping animals which efficiently convert the non-food produce –often called "waste"- from crop, food, forest and pasture systems,
iii. while providing evidence for the former two, have a multitude of GPs at hand for dissemination.

[3] The annexure on page 6 and 7, provides an overview of 'Investments' (three fold: bio-physical, social-institutional and facilitation) versus 'Returns' (primary and secondary level) with regard to regenerating and managing CPRs.

- **Increased fodder availability**, in both quantity and quality all over the year. For example, in Rajasthan and Madhya Pradesh, the average standing tree biomass in regenerated commons averaged 53 ton/ha versus 20 ton/ha in non-regenerated CPRs.
- **Increased water availability**, in terms of both spread and time. In Thoria village, Rajasthan, water levels in open wells increased by around 10 feet following CPR regeneration; in the Ladwan watershed of Madhya Pradesh, water levels were found higher in 63 out of the 83 wells surveyed,
- **Increased people's capacity to manage CPRs**, such as shown by the variety of organisations and institutions which have been formed by CPR users and non-users alike.

Depending on the agro-climatic conditions and the socio-institutional framework, good CPRs-livestock management can also bring about positive spill-over effects, such as:

- **environmentally responsible management practices** on private land parcels and other common properties (e.g. road side grasses; ponds),
- **diversification of household livelihood portfolio**, including changed number and type of farm animals,
- **bio-diversity conservation and regeneration**, such as saving endangered species and reviving traditional crops and tree species/ flora.

There are no direct policy implications out of this evidence in terms of what to do and how; but policy makers would be myopic if they did not considerer investments in CPRs as a possible tool towards increasing livestock production and productivity, with simultaneous contribution to poverty reduction.

3) Investing in CPRs-livestock is good economics and good policy

Investing in CPR development is not only good for the poor but appears to make also economic and policy sense.

The GPs suggest that, whilst the initial start-up costs of CPR programmes can be high, the recurrent costs of CPR maintenance are more than offset by the increased monetary benefits accruing to users. CPRs are today largely managed by local people, with the initiating/facilitating agency playing a background role or having stepped out all together.

In economic terms this means that a one-off investment in CPR regeneration can suffice to promote a sustainable long-term use of CPRs –i.e. to ensure increased production and year-round availability of fodder and water for livestock – as there is no need of external finance for day-to-day CPR management. The returns to investments would be even higher if the subsidiary and non-monetary value associated to sustainable CPR management were taken into account, such as bio-diversity conservation and poverty reduction. On the negative side, returns to investing in CPRs are evident and widespread only in the medium to long-term.

The policy implication is that policy makers should invest in CPRs with the aim to increase production and productivity in the livestock sector as well as contributing to poverty reduction. The issue becomes: how to invest, how to design and budget programs and schemes?

4) Priority areas of investments for CPR development

Each GP in CPRs-livestock has its own distinctive characteristics, which depends on the uniqueness of the local agro-climatic, socio-economic and institutional conditions. Mechanically replicating GPs in CPRs would therefore mean wasting money, be they public or private.
Reviews of the CPRs-livestock GPs, however, show that there are some common investments which appear always necessary to promote regeneration and maintenance of CPRs.
These **investments** pertain to three domains:

a) **Bio-physical investments**, i.e. interventions which are necessary to regenerate and sustain the increased productivity of CPRs;
b) **Social-institutional investments**, i.e. actions which help local people to establish organizations and institutions, namely the rules and regulations which provide incentives / disincentives to users (and non-users) of CPRs;
c) **Facilitation investments**, i.e. actions which allow and enable local people and authorities to appreciate the importance of CPRs for livestock production and start working on their regeneration and management.

The policy lessons are that programs/schemes should be built around an appropriate combination of investments in these three domains =bio-physical, social-institutional, facilitation=, which only ensures the regeneration and sustainable management of CPRs-livestock.

5) Bio-physical investments in CPRs

Regenerating and the sustainable management of CPRs involve three major technical and material investments:

a) Investments to demarcate and fence CPR area, for instance by making use of stone walls, live hedge-fences, etc.
b) Investments to increase production, quality and year-round availability of forage and fodder, such as natural regeneration of tree, shrub and grass species, re-seeding and planting of tree/shrub/grass species, etc.
c) Investments to make a better use of available water, such as building contour trenches, plugging gullies, building check-dams, etc.

Most of these interventions are relatively simple, rely upon appropriate and often indigenous technologies and know-how, which do not require advanced skills, and are low cost, as locally available materials are widely used. The additional advantage is that these structures can easily be maintained by the people.

The lesson is that programs aiming to improve fodder production and productivity should make bio-physical investments in CPR namely in land demarcation, and soil and water conservation measures, whereby giving adequate appreciation to appropriate / traditional technology and know-how. The costs and returns to these investments can be calculated ex-ante.

6) Social-institutional investments

Identifying and implementing the most suitable technology options for rehabilitating and managing CPRs requires involving and motivating people to participate and take control in order to benefit from the bio-physical investments made. The GPs show that investments in people centred approaches are appropriate to facilitate broad-based participation and consensus building, such as:

a) Deliberate crafting / strengthening village-based institutions with clear roles and rules, such as CPR user committees / groups / associations comprised of local people representing different classes, castes and gender,
b) Co-opting / consulting local authorities / local organizations while defining rules and regulations governing access to and use of CPRs, including rights, duties and penalties for rule-breakers,
c) Supporting village-based institutions to define and implement unambiguous and equitable benefit sharing mechanisms for CPR produce and outputs,
d) Carrying out participatory research / community surveys to identify the most binding developmental constraints and identify priority areas and type of interventions,
e) Carrying out participatory action-research to document and validate current and past CPRs-livestock management practices, including species regenerated/ planted and their nutritional value for farm animals.

The lesson is that CPR programs should be people centred whereby institutions can facilitate collective decision-making, access to know-how, technology options etc. Thus, CPR programs should avoid being prescriptive but only provide the broadest thrusts. It is best left to local people, local government bodies and facilitating agencies to figure out what are the most appropriate institutions / methods to facilitate broad-based participation and collective decision-making in a given context.
A problem for program design is that whereas the cost of establishing some institutions can be calculated ex-ante, it is difficult to budget the time and resources necessary to capacitate and empower those institutions in order for them to perform their role effectively.

7) Investments in facilitation

Establishing and supporting functioning local institutions requires that local people are first of all motivated to start working together. This is rarely an issue when one deals with private resources, as the owner reaps all the benefits of his effort; in the case of CPRs, however, it is critical to encourage the multiplicity of CPR uses and users to make collective efforts. A number of options are available to the facilitating agency, to better the systems of incentives, both at the 'macro' and the 'micro' level. At the micro-level, the facilitating agency can:

a) Ensure that local people get secure access to CPRs, which is a pre-condition for livestock holders and CPR users to contribute to land-fixed investments. This could

be done through reinforcing traditional mechanisms for conflict resolution, building upon legal texts, paying the services of a security guard, etc.

b) Ensuring that local people have a clear understanding of the potential value of the fodder produced by CPRs, such as through awareness campaigns and exposure visits,
c) Initiating interventions on small or marginal areas first, and scaling them out only when the livestock-dependent households have recognized their value,
d) Providing temporarily and partially an alternative source of fodder,
e) Recruiting a certain number of local people for program implementation, including women, to build trust and show genuine commitment towards CPR development,
f) Providing local people with 'light' livestock services, such as some animal vaccination and drugs (e.g. deworming) or marketing facilities, to make investments in CPRs more appealing.

At the 'macro' level, the intervening agency should ensure that local and national authorities are supportive of, or at least do not oppose CPRs development. For instance, they can:

a) Carry out advocacy campaigns targeting national and local policy makers about the positive returns to investing in CPRs in terms of both livestock production and poverty reduction,
b) Establish platforms for continuous dialogue with Central and State Governments,
c) Seek convergence between different sources of funding, including national and state governments, corporate and other donors to better accommodate the multiple development interests whereby addressing the objectives for CPR development.

The lesson is that CPR programs should allocate part of their budget to seemingly peripheral activities, which are critical for the efficacy of both bio-physical and socio-institutional investments. It is in fact fundamental that users are taken on board from the very beginning and that both users and non-users fully appreciate the potential positive impact on CPR development on fodder production and productivity and, in general, on livestock sector growth. Budgeting for such tangential activities is however difficult, as many options are available which have to be further tailored to local circumstances.

8) Towards CPRs-livestock policies and programs

CPRs-livestock GPs show that investing in livestock makes economic sense for policy makers if the objective is to promote livestock sector production and productivity, along with poverty reduction.

The major policy implication is that the forthcoming Five-Year Plans and other relevant agricultural / livestock sector policies and strategies in South Asia have a defined focus on CPRs. It would be critical, for instance, to measure and monitor the value of the palatable biomass available in forests; to compare the returns to investment in fodder cultivation programs[4] versus CPR regeneration and maintenance; to set-up and experiment with new programs and schemes supporting the regeneration and sustainable management of CPRs through the participation of all the custodians of common lands.

[4] Referring to the strategy investing in production of fodder seed and distributing these to livestock farmers in order to cultivate planted fodder.

The implications for program design are challenging. The GPs show that, whereas some common elements pertain to all the Good Practices − including investments in bio-physical elements, in institution-building and facilitation − these have been packed together in a variety of different but all effective ways, none of which proves superior to the others. In other words, the issue is not simply about investing in all three domains simultaneously but also about giving local people, governments and the intervening agencies the flexibility which is necessary to identify the most suitable typology of investment/ investment package in the context at hand.

The government should therefore design CPRs programs only according to broad areas of investment – i.e. the bio-physical, socio-institutional and facilitation domains – and leave the responsibility of identifying implementation details to local people, governments and facilitating agencies. No doubt that many of these programs will fail, but what matters is that the overall benefits generated by the successful ones will be more than offset the net costs for society of the failed ones. There is nothing wrong in that, but for the simple recognition that both central and local governments have limited information and do not know exactly what has to be done; that local governments have better information than central authorities; and that, such as in the private sector, failures are to be expected.

It makes a lot of economic and policy sense for decision makers to design CPRs-livestock policies, but only flexible programs appear an effective instrument to effectively support the regeneration and sustainable management of CPRs towards increasing livestock production and productivity and enhancing people's livelihoods.

Annex 1. Overview Lessons learnt –GOOD PRACTICES: 'Common Property Resources – Livestock'

RETURNS - Lessons for Return- IMPACTS	RETURNS - Lessons for Return- HIGHER LEVEL EFFECTS
- Increased quantity of CPR Fodder - Improved quality of CPR Fodder - Increased amount/quantity of Water - More Water available for longer period of time - Year-round Fodder/ Water security for livestock - Increased capacity of people to manage CPRs	- Better understanding of interconnection between ecosystem elements, - Improved groundwater table, - Involvement of people in CPR activities leads to responsible management of others resources –private land, ponds, road sites- e.g. reflecting on mono cropping, use of chemical fertilizers etc; planting trees, intercropping, dual purpose crops, - Diversification of household livelihood portfolio/ activities, including changed number and type of farm animals, - Bio-diversity conservation and regeneration, such as saving endangered species and revival of traditional crops, - Documenting and disseminating local knowledge leads to increased concern about and the promotion and conservation of indigenous flora and fauna.

INVESTMENTS -Lessons for Investment-		
BIO-PHYSICAL	**SOCIAL-INSTITUTIONAL**	**ROLE of FACILIATING AGENCY**
- Demarcation of legal (physical) CPR boundaries - Locally suitable Fencing e.g. live-hedge (BAIF: Prosopis, 60% of their budget), stone-	- Ensuring that both users and non-users alike understand that CPRs are a major source of fodder and water for poor and marginal livestock keepers - Demarcation corresponding to conventional user regimes - Mechanisms for social fencing/peer	- Continuous dialogue with Central and State Govnt and its different departments - Creative use of finance/ seeking convergence from diverse sources for multiple activities across

INVESTMENTS -Lessons for Investment-		
BIO-PHYSICAL	**SOCIAL-INSTITUTIONAL**	**ROLE of FACILIATING AGENCY**
wall+social+others (FES 25% of Budget) - Selection and plantation/ regeneration of locally suitable species -agro climatically, needs wise, customs - Use of technology that is appropriate to local conditions, takes ITK into consideration and that can be easily maintained by people e.g. earthen structures, loose-boulder check dams - Work on contiguous areas (rather than small patches) incl. private lands - Start on small plots to test and increase acceptability of different technology options - Choice of technology based on number of people benefitting rather than using the most extractive technology e.g. Gomukh - Use of integrated set of technology options e.g. protection-termite control- soil conservation-water harvesting - CPR use during early stages of development to be decided on the basis of feeding and fodder requirements of livestock depending on it.	pressure e.g. penalties, people by rotation, guards- paid by outsiders/ people - Liaisoning for acquiring secure tenure e.g. continuous dialogue with administrators, elected reps, state Govnt officials, creating strategic committees, studying existing legal provisions, - Deliberate crafting/ strengthening representative village-based institutions with clear roles and rules e.g. Gomukh: minimum percentage of women members non-negotiable, BAIF: 2 reps per caste group - Consult, document and validate men and womens' choices (separately) of species (past-present-future) e.g. ANTHRA action-research, Gomukh, FES ecological profile - Assess nature and extent of dependence of livestock/people on CPRs e.g. FES- surveys - Well defined, acceptable and transparent benefit sharing arrangements built on consensus e.g. FES - Distribution mechanism that extends maximum benefits to a wide range of people/livestock - Ensuring that backward and forward linkages are in place e.g. BAIF cattle breeding service and market for milk, 'light' services as incentive to participate - Using combination of extension techniques to motivate and ensure long-term interest of people e.g. BAIF: exposure visits, local extension worker, Gomukh: pilots, building on traditional know-how (ANTHRA) - Involving people in exploration/ research/ validation leads to better ownership + responsibility of the desired change agenda e.g. ANTHRA - Involving elected reps and local administrators to bring in synergy during implementation e.g. Gomukh-mtgs with Talathi, Police-patil etc. - Create spaces for appreciating the range of fodder resources- encourage complementary use of fodder from both public and private lands - Documented ITK to be made available for local use and dissemination e.g. ANTHRA local language - Securing participation of women in decision-making e.g. Gomukh- separate meetings, women office bearers in local committees	implementation phases e.g. Gomukh - Readiness to work across a range of interventions related to CPR either on its own (BAIF) or by forging partnerships (Gomukh) - Building rapport and winning trust with people and other actors (Govnt, funders) e.g. Gomukh-30% local staff, ext workers residing in village - Developing technologies through participatory research e.g. ANTHRA: action res builds know-how, informs current practice of locals and builds respect for local knowledge among scientific researchers - Ensure community contribution (and thereby retain their commitment) through different ways such as shramdaan, assured and timely returns - Attempt replication of principles on which interventions are based rather than expanding programs mechanically- allow for locale specificity/ different micro-realities e.g. BAIF: Silvipasture in 76 villages (SGSY), FES - Acknowledge farmers' knowledge at par with scientific knowledge with due validation/ invalidation and vice-versa e.g. ANTHRA nutritive value of fodder/ grasses - Ensure generation of short and medium term benefits e.g. FES, BAIF

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Our Motto

*"development of **healthy environments** in which **healthy animals** are reared by **healthy people**"*

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