

POLICY DIALOGUE PROCESSES FROM AN ENDOGENOUS DEVELOPMENT PERSPECTIVE: THE CASE OF THE BUSHFIRE LAW IN GHANA.

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ABSTRACT

Policy dialogues have become topical in the development arena in recent time. This arose, in part, from the concern for issues on rights and marginalisation. Methodologies for dealing with such dialogues are however rare.

In this paper, we make an effort to contribute to this 'grey area' by presenting one experience as a case study. We start the paper by making an entry through endogenous development as a paradigm shift for development intervention. We highlight the need for co-evolution of knowledge systems as a way to set the stage for a policy dialogue that combines both the 'formal' and 'informal'. We then proceed to present the experiences of the BURN Project within which we describe the Three-Tier Approach to maximising the involvement of all stakeholders in a policy dialogue process (a branchchild of the BURN Project).

We conclude with highlights on some key content issues that are pertinent to the dialogue.

Key Words: Policy, Dialogue, Endogenous, knowledge, community

1.0 INTRODUCTION

THE STORY:

Madam Akolpoga came to complain to the Chief of Kalbeon that her farm was burnt by uncontrolled fire that came from a

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neighbour's field. The Chief referred her to the Assemblyman and the Chairman of the Fire Volunteer Squad of the Village because, according to the Chief, the authority for managing fire-related conflicts within the Community has been shifted from him by Government to these two functionaries under the PNDC Law 229. Madam Akolgo continued to see the Fire Volunteer Squad Chairman. The Chairman said there was very little he could do about it. The previous year there was a similar incidence reported to him. He took the trouble to go to Bolgatanga, (the District/ Regional Capital,) to report the case to the Police and Ghana National Fire Service. The two Officers were prepared to go to attend to the case provided he, the Chairman, could provide transport to and from the Village. He could not afford the transport cost hence nothing happened. He therefore was not keen on going there again.

The narrative above stimulated the need to initiate a policy dialogue in northern Ghana, an initiative of University for Development Studies, CARE International, CECIK, and three other NGOs with funding support from DANIDA. This Project is within the ambit of the Bushfire and Rural Livelihood Development in Northern Ghana Project (BURN Project). The questions that attracted immediate concern for the policy dialogue were:

- What is in this PNDC Law 229 referred to here?
- How did power for regulating and controlling bushfires change from residing with the chiefs and communities to Fire Volunteer Squads?
- Why is the operationalisation of the policy restricted to complete non-burning (ban on bushfires)?
- Is the policy aware that the total ban on bushfires is not working and hence engenders a re-visit of the law and subsequent reformulation?

These pertinent questions propelled the bushfire policy research and the dialogue that ensued. We intend in this paper to focus on the

dialogue processes rather than the content issues that the research unearthed.

This paper starts with a theoretical debate on endogenous development. It presents endogenous development as an alternative development model, which provides a more appropriate framework for dealing with the 'true empowerment' of people to deal with issues that concern them. We proceed from there to describe five phases of the dialogue process and conclude with highlights of the findings of the policy research under the BURN Project.

2.0 THEORETICAL DEBATES

2.1 THE UNDERPINNINGS OF ENDOGENOUS DEVELOPMENT

In other works, Millar defines and goes beyond definition to describe what endogenous development entails (Millar, in this issue). He explains that endogenous development refers to development that is mainly, though not exclusively based on locally available resources, such as land, water, vegetation, local knowledge, culture, leadership and the way people have organised themselves. External knowledge and resources use only complement to local resources. It has mechanisms for local learning and experimenting, building local economies and retention of benefits in the local area. Endogenous development does not imply isolation, nor does it limit its attention to local processes. It may use some opportunities provided by globalisation (Millar, 1996).

In this article, we move the debate a step higher by developing a couple of statements on endogenous development. To cite Haverkort and Rist (2004) "... different sciences are representing different processes of social construction. Taking into account the dominant role that formal science has, it is important to understand the differences and similarities between formal scientific and local forms of knowledge". Rist and Wiesmann (2003) analysed this position by

examining the explanations given by formal science and Andean knowledge on the occurrence of the phenomena of hail. It shows that the explanation of natural science focuses largely on understanding HOW the phenomenon originated by identifying the corresponding causes that relate to factors such as temperatures at different altitudes, humidity, flow of air, gravity. It considers these as highly accidental occurrences that make it difficult to forecast where and when it happens.

However, in the view of Andean knowledge, hail originates from a violent spilling of blood. This makes possible the investigation of Who did it and What ritual for necessary for appeasing the spirits that caused the hail. Here, the focus is largely on understanding WHY hail is occurring in a certain place and moment. The fact that many local people in Andean communities are strongly engaged in debates and discussions trying to understand HOW this kind of interrelations are operating, suggests a perceived deficiency of their own form of knowledge in relation to another form of knowing (Rist, 2002).

This example is quite typical for many other local sciences, also those in Africa (but especially northern Ghana). It allows us to state that there are different ways of looking at natural or social phenomenon. By explaining the phenomenon based on causality within a rational framework, the focus becomes one of on how things happen.

Social action is intimately related to the 'why' and 'how' questions. In the Social Sciences, it is widely accepted that meaning making guide social action. This implies that the ways we give meaning to what is happening (or 'why' it happens) are becoming the bridging element between perceiving and acting. From this perspective, we share the views of Haverkort and Rist that the dialogue between different forms of knowledge is not possible without considering a dialogue between different epistemologies (Haverkort and Rist, 2004). In our bushfire work, policy concentrates on how to control envi-

ronmental degradation of which bushfire is a part. The various international conventions evoked centred on dealing with management strategies that dwelled on the 'How.' We have found that farmers in their pursuit of the 'why' have the following experiences to share in addition to all the human reasons for bushfires:

Box 1: Farmer Experiences

Fairies set the fires because of their dismay with certain behaviours of the human populations as in spontaneous fires.

Neighbours set the fires to intentionally harm others as envy or 'evil eye'.

Ancestors not too happy with sacred performances hence send the fire in the form of lightening.

**** There is one instance from the Upper West Region of Ghana when the issue of non-burning in the village came about because a soothsayer in conducting a ritual for poor yields in the Village got a revelation that said that the ancestral spirits were annoyed and denied the people good harvest because of the yearly scourge of bushfires that the people meted on the land; which is their abode.*

The solution was therefore to stop burning the ancestors and they will in turn provide food for all. This has led to an endogenous sustainable bush-fire management in the village for a long time now.

2.2 ENDOGENOUS DEVELOPMENT WITHIN A WIDER FRAMEWORK

The ongoing process of globalisation involves the entrenchment of western modern knowledge and technologies throughout the world. The dominant education and research systems shape global (western) knowledge and value systems. As a result, development activities have tended to enhance technologies with international standards rather than to support the needs of specific regions or populations. In agriculture, the use of external inputs has increased due to extension advice and subsidy policies. In health, western biomedicine has reached out to all corners of the globe. Although these

efforts have led to definite improvements in productivity and health, awareness related to the problems associated to this approach is increasing.

According to Haverkort and others, globalization has triggered local responses, called "localization" that emphasizes local ownership and local culture. Despite the apparent acceptance of dominant technologies, a number of indigenous institutions have survived and a wealth of indigenous knowledge still exists. Grassroots organizations observe that working in different cultures is threatening there is still much indigenous knowledge, cosmovision and traditional leadership unexplored. Indigenous knowledge and leadership have their strengths and weaknesses. Although often not perceived by outsiders, these still form the basis for the decisions made by the majority of rural people (Haverkort et. al. 2002).

Contemporary bushfire policies and management strategies in West Africa are in general critical of the use of fire by rural communities. The tenets of colonial bushfire narratives and currently international conventions are often writ with negative bushfire policy statements. Global presentation indicate a single, objectively knowable perspective which invariably assume bushfires are a problem, burning bans are to be enforced and that social contexts are uniform.

Various national and international conventions exist intended to mitigate the harmful effects of bushfires. The Regional Implementation Annex for Africa discusses the issues of desertification and drought with a challenge for long-term actions to mitigate the situation. The response to this gave rise to a series of policy guidelines. Pages 52 – 54 of the *National Action Programme to Combat Drought and Desertification* elaborate the bushfire issue. Herein, the debate between non-burning and early burning mentions very little in terms of proposed strategies to act either one way or the other. The Draft National Bushfire Management Strategy Paper has shown a gross lack of research and empirical information to commit itself to specific actions. Its mentions the involvement of commu-

nity and local authorities says very little on how to do so. The establishment of institutional linkages and coordination has also been identified but not sufficiently addressed.

In Ghana, laws, bye-laws, regulations and 'public awareness' campaigns have not significantly changed the behaviour of rural communities with regard to their traditional uses of fire in *i.e.* agriculture, livestock husbandry, hunting, bee-keeping, gathering of fruits and other Non Timber Forest Products, the protection of sacred groves and traditional fire/group-hunting festivals. They may even have contributed to increased uncontrolled wildfire incidents. This suggests that either the bushfire 'problem' does not exist or that there have been - and still are - widely different perceptions of the bushfire 'problem'. Bushfire has become a major cause of land degradation and successive policies have failed to address it effectively.

Community- managed systems linked to traditional authority, institutions, and rules have the potential to manage bushfire provided they are pursued locally instead of globally, and that they are considered within the wider framework of endogenous development.

3.0 COMPAS APPROACH AND EXPERIENCES

One of the agencies that supports and enhances local initiatives for endogenous development is COMPAS. Its partners have ongoing programmes in the domains of poverty reduction in marginal areas, participatory development, local management of natural resources and ecological processes, low external input and sustainable agriculture, biodiversity, local health systems. These programmes build on local knowledge and enhance cultural diversity.

Based on their experiences the partners (of which CECIK is a member) have concluded that the conventional approach to support development, consisting of transfer of technologies, knowledge and values from the modern world to the underdeveloped world, needs

revision. Rather traditional knowledge and values with its technical, social and spiritual dimensions need acceptance as the starting point for development.

COMPAS functions as an international network that links practical interventions in rural areas with theoretical reflections about development options and thus contributes to the emergence of insights and a diversity of operational and effective approaches. The approach of the COMPAS programme is one of an action-research on endogenous development. It hopes to be complementary to the many organisations that have similar focus but that restrict themselves to fieldwork or research or to the technical aspects of indigenous knowledge only. It thus hopes to support the growing movement towards endogenous development.

Supporting endogenous development does not imply a narrowly defined development approach and is neither romanticising nor rejecting traditions. Endogenous development is as an approach that takes place complementary to the ongoing technological and economic global processes. It wants to address local needs and contradictions, use local potentials and link local economies to international systems with optimal terms of trade. It supports co-existence and co-evolution and of a diversity of cultures. Intercultural research, exchange and dialogues will be helpful to find the most desired development path in specific contexts building on the accumulated experiences.

Indigenous knowledge and practices do not have all the answers to present day challenges. They may have certain limitations or setbacks. Farmers, rural and urban people in the south take decisions and define their relationship with outside knowledge and agencies based on their own culture and values. Therefore, for development organisations to be effective in supporting endogenous development, they need to understand the basic characteristics and acknowledge the existence of local forms of knowledge, and the worldviews that they are based on. In fact, the choice for endoge-

nous development and for co-evolution of forms of knowing is a major shift in paradigm. The present systems for research and development have their own interest in the continuation of the status quo.

2.3 THE POSITION OF CECIK IN ALL THIS DEBATE

The Centre for Cosmvision and Indigenous Knowledge (CECIK) in Northern Ghana is championing Cosmvision related endogenous development practices. This type of development underpins people's cultures, belief systems, and worldviews – especially their spirituality.

Given the wide range of options in belief systems, values, practices and knowledge concepts, and power positions, there are many modalities for intercultural relations. The present dominant position of materialist values and global technologies tends to marginalize minority cultures and diminish cultural and biological diversity. This calls for a re/definition of relationships and clear linkages between various forms of knowledge.

Building on the analyses and arguments discussed so far we suggest an intercultural social learning process with a step-by-step approach carried out by multiple actors. The process will include at least the following actors: Local people, their intellectual, political and spiritual leaders, local NGOs like CECIK, Government agencies for rural development, education and research, educational institutes and research centres. Also, there is the need to involve national and international donors and development agencies who have a role to play. This is the position CECIK is developing and propagating.

It is our belief that each actor can contribute to the social learning process in its own unique way. Local people can share their local knowledge. NGOs and Governmental development agencies can support the process of revitalisation and improvement of the local

knowledge and way of knowing, schools can include local forms of knowledge into their curriculum, Universities and Research centres can conduct supportive research to the epistemologies and to support the action research programmes. National Governments can put policy priority on endogenous development and revise their current mechanisms for development in this light. International agencies for research and development and donor agencies can make available funds for these activities. Local and international communication media can serve to foster credibility and ginger support for a mutual exchanges.

3.0 POLICY DIALOGUE REVISITED

The theoretical presentation above centres on the co-evolution of two sciences or two knowledges (here we use sciences and knowledges interchangeably). The ensuing provides one way of conducting co-evolution process, from an endogenous development perspective, and within a policy dialogue framework. This is a case study emanating from the Bushfire and Rural Livelihoods in Northern Ghana (BURN Project) that was managed by a Project Team put together very early in the process by CARE International and University for Development Studies (UDS):

3.1 PHASE ONE

The first step of the dialogue process involved the identification of stakeholders. The first category of stakeholders were those who shared common vision, mission, and objective as the Communities with respect to the issues at stake (various forms of burning – including non-burning as a bushfire management strategy). The second category consisted of those who may be perceived to be absolutely committed to non-burning (Government functionaries). Each of these categories of interested was purposefully selected and contacted; first by writing letters of notification to them (with copies of Project's intentions) and then later following to have one-on-one contacts (allowing for detailed discussions). A third group of

persons contacted were those in research and academia who were knowledgeable about the subject but relatively neutral. Their task was to search and produce back-up information that could be supportive to anyone side of the debate.

The fourth activity we embarked on in this phase was to search and gather all relevant material (largely archival) from the region, the Country, and the Sub-region or bushfires. Most of the material we found were experiences of bushfire dialogues from Burkina Fasso, Mali, Niger, Senegal. Most of these were also PhD researches.

We also conducted a detail search for laws and strategies in Ghana since the pre-colonial era till date. We found various laws and legislative instruments of Forest Management, Forest and Wildlife laws, Land Policy, studies on Non-Timber Forest Products, various national strategies, agreements, treaties and the National action plans (one on desertification and drought). While the build-up of the documentation was ongoing, we embarked on a series of primary information gathering as in the Phase two below.

3.2 PHASE TWO

In the Phase Two the four Pilot Communities we identified to work with in Phase One became the first line of action. We prepared them for a very intensive research sought to re-construct their life histories with respect to bushfires. This research was led A Team from the University for Development Studies lead this part of the process. They methodology used was a *Gender Sensitive Three Generational Analysis*. This research spanned over three months in each Community.

While this was going on in the Pilot Communities a parallel investigation was also initiated referred to as *Community Institutional Mapping (CIM)*. This was again to enable communities generate mental maps of their traditional institutions, past and present while identify various roles played and responsible agents for natural resource management. This brought to light those institutions that

were/ are responsible for bushfire management for future follow-up actions.

At this stage, various governmental institutions were asked to prepare papers based on a 30-year history of their work in bushfire management. A similar exercise involved politicians at the District Assembly level.

At the national level, contacts with the key personnel of ministries involved in bushfire management resulted in discussions on project goals and invitation thrown for the presentation of position papers. Some topical research areas, which will otherwise remain 'grey', were identified by the Project management group and contracted out to resources persons in research and academia to investigate and document.

While this was happening, a smaller Project Team was put together to start synthesising all the secondary data and also the primary data that was available very early, and also set in motion preparations towards the National Workshop with Policy Makers.

3.3 PHASE THREE

When the first drafts of the Gender Sensitive Three Generational Analysis and the Community Institutional Mapping were completed, various gender sensitive community level workshops were held during which the Government Functionaries and some NGOs were present to listen to the Communities. Although the Researchers facilitated the presentations, the Communities led it, saying what they thought about the findings, validating them, challenged each other, and up-dating the findings until such time that they agreed it was their product and that they could present it at any policy level discussion.

The various functionaries were invited to cross-examine the presenters and bring up their positions in the form of 'phased assertion/confrontational dialogue.' This made the community members more

assertive and 'battle ready' to defend their course and for any challenges ahead. The various reports were then taken back for finishing.

In the interim, the Pilot Communities went for an organised excursion to other Communities and Projects within the four regions of northern Ghana (Northern, Upper east, Upper West, and Brong Ahafo) where there were attempts to deal with bushfires as a development issue. This took two weeks. On return, they were in high spirits and very well motivate.

A second Community level workshop was organised similar to the first but now to present the final report to the various Communities. At these workshops each Community nominated their 'Ambassadors' to represent them at the National Workshop. The composed representatives included the Chief, the Women's leader, the Youth Leader, the Fire Volunteer Chairman, and one key person of their choice. These 'Ambassadors' were taken through a series of preparations based on the final report that they accepted as their product. They were facilitated to 'walk through' the report stage by stage to be sure they can truly represent their Communities' interests.

These activities run concurrently with the collection and collation of the various papers from te resource persons and finalisation of preparations for the National Level workshop.

3.4 PHASE FOUR

3.4.1 OVERALL POLICY WORKSHOP APPROACH

A Three Tier Approach was used in obtaining views from participants during this workshop. The essence of this approach is to allow at each level uninhibited discussion by a particular interest group using their own communication tools and any language that enhances sharing and cross-fertilisation. This otherwise will not happen say if you put farmers and Government workers together or

when you put Government workers and Policy Makers together. It took five days to execute the entire approach as follows:

Level One. This stage was composed of only community representatives from the four different Communities who deliberated at length on the information collect during the field level investigations and their experiences during the excursions. During this discussion the Communities nominated representatives as Ambassadors to for the next level (Institutional/ Organizational level) forum that was to come after the next two days. At the end of this level's two days of deliberations, the Communities arrived at a statement of purpose which they prepared their Ambassadors to present on their behalf to the institutions /organizations level.

Level Two. This level was composed mainly of NGOs, Ministries, Departments, and Agencies (MDAs) with a few representations of Community members as ambassadors. This session also took two days of deliberations on their positions with respect to bushfire management. Presentations were made on behalf of their various institutions and other resource persons, as well as a statement of purpose by Community representatives which their Ambassadors presented. Thereafter discussion ensued for the next two days at the end of which this category of stakeholders (Institutions/ Organisations) also derived their statement of purpose to be presented to the Policy Makers. Also at this level the Institutional/ Organizations nominated representatives are Ambassadors to policy level forum.

Level Three. This level was made up of Policy Makers as majority with the Institution and the Community representations as Ambassadors. This session took one day. The Communities were first to present their position paper and thereafter the Institutions/ Organizations presented their statement. The Policy Makers also presented their speeches after which a discussion ensued. Various research findings that confronted policy were also presented to the attention of the Policy Makers. At lot of 'de-schooling and re-schooling' took place here about the policy and policy implications of Govern-

ment's stand. This forum concluded the National Policy Workshop on Bushfire management but did not end the policy dialogue process since the need for follow-ups emerged.

3.5 PHASE FIVE

- The first level of follow-up was for the various Ambassadors to go back and report to their constituents; the representation of Government to their offices and the Community representatives to their people. This was meant for the 'Ambassadors' to render account of their stewardship. The report for the Communities took the form of organised community level workshops. After this feedback workshop some development actions started spontaneously as promising/ potential '*Best Practices*').
- At the level of reporting on the proceedings, the various papers were worked upon as advocacy material and shared to a wider audience. This created a wider critical mass of audiences than were at the workshop. Some of the papers were worked into teaching materials to provide 'new knowledge' for the students who are potential policy makers or policy implementers.
- The Workshop identified the need for a Baseline Survey starting from all the materials gathered so far. Some topical researches were also identified to provide more information for an informed policy position. These were seen as action domains for research and academia and were thus contracted out.
- A follow-up review session of the outcomes of the Workshop was also planned to follow the *Three Tier Approach* - it will start with Communities deliberating, then to the District Assemblies and gradually build up to a National level review in Accra (the National Capital). This discourse is intended to culminating in an Accra forum in order to guarantee the presence of the relevant Ministers and also the Parliamentary Select Committee on Environment and the Parliamentary Select Committee on Pol-

icy. The follow-up here is to broaden the advocacy net and thereby guarantee response if not awareness.

4.0 CONCLUSION

The dialogue process thus followed provided a great learning opportunity for all the actors. It provides a scientific basis for conducting policy dialogue (limiting science to a logical fact finding process). It is our view that scientific dialogue is a common generic process of systematic fact finding of which policy dialogue is a part. This work has enabled us to look at theory and practice in their discrete and conjoined manner (praxis). We are at the threshold of deepening our understanding endogenous development in a more epistemological manner. All the actors came out of this exercise richer as expressed in the ensuing:

The Communities felt empowered and, above all, motivated to reassert themselves and embark on their self development with respect to bushfire management with more enthusiasm than ever before.

Government functionaries suddenly became better informed about what the Bushfire law (PNDC Law 229) stood for and how Communities on their own and in their traditional systems used to manage bushfires. They also become more aware of possible synergic relationships between them and the traditional authorities (they identified several points of coincidence for future collaboration).

The University had, for the first time, a hands-on policy research situation that provided opportunity for learning/ teaching and documentation. As part of a backstopping team, the University also, for the first time, was able to develop and test methodologies that will inform posterity and any other person(s) who might be embarking on a similar exercise.

The partnership built among all the stakeholders has provided a long-term platform for networking and collaboration within the region on issues beyond bushfire management issues as is currently

evolving. Based on this experience, the following steps emerge as and lend themselves to a policy dialogue process:

Box 2: Policy Dialogue Process

- Identifying a common agenda, vision and mission (*Awareness creation*).
- Identify what is the policy issue to be confronted (*Issue identification*).
- Look for strategic partners and alliances (*Broadening the scope of interests*).
- Build information: Community perspective, Policy position, Strategies with respect to Policy, Secondary information also as archival material, Conduct supplementary investigations (*Information build-up*).
- Conduct local workshops (at the Communities) on information sharing and identify relevant traditional authorities, institutions, and systems with respect to the subject (*Ensuring ownership of information and commitment to endogenous action*).
- Build a constituency of like-minded communities and also cross-link them (*Up-scaling ownership to include the non-local strategic alliances – different stakeholders*).
- Organise national forum at the Region to create awareness and share (*First level sounding and sensitisation – with different stakeholders*).
- Organise nation-wide regional workshops with several other Regions to build a consensus and deepen the pressures. (*Building up a challenge for national response*).
- Organise national workshop at the Capital to present request (*Inducing a national response*).
- Follow-up at the policy level for feedback and responses (*Soliciting reforms*).

5.0 CHALLENGES

This experience is still very young. The eight months encounter has seen us move from community level preparations to policy level talks – a process that normally take a couple of years to attain. Recent events show that we have ‘caught the eye of Government’ as reflected in the nation-wide regional workshops that intend to culminate in a national workshop. These successes notwithstanding, there are the following challenges that we have to confront in our next steps:

How to conduct theory building around the local knowledges that we mentioned in the earlier chapters – with respect to bushfires. How to investigate and highlight the dichotomy between emphasis on the ‘How’ and the ‘Why’. How they influence the different epistemologies and how they do and can co-evolve. What modification is required to ensure a synergy between the two knowledges?

In the action that are to follow, there is a conscious attempt to further investigate, based on livelihoods identified, how development can be enhanced with this experience. The questions that arise include; to what extent is experience with bushfires leading to additional insights about endogenous development and to the inter-scientific dialogue.

To show proof that Community- managed systems linked to traditional authority, institutions, and rules have the potential to better manage bushfire provide they are pursued locally instead of globally, and that they are considered within the wider framework of endogenous development.

Box 3: Some Key Content Findings

The PNDC Law 229, since its formulation in 1996, is still awaiting the necessary legislative instrument (LI) to make it operational.

The Law is described by Legal Experts as a ‘panic law’ that, as at now, has ‘no owner’.

The law does not only talk about total bans on bushfires. There are clauses that advocate the formation of ‘Early Warning Systems’ that will alert when early burning should occur.

Therein are mentioned alternative forms of burning with the necessary safeguards hence its current operationalisation is different from the letter and the spirit of the Law.

Rural Communities have their own fire management systems that combine non-burning with early, late, and multiple burning.

Though weak, the traditional management systems and structures still exist, are still relevant, and could be activated (within the right incentive structure and enabling environment) to perform.

There are ‘indigenous best practices’ of bushfire management that could be developed to enhance effective community-based bushfire management (e.g. bushfire and livestock management/ bushfire and wildlife management).

Wild fires are a nuisance and are not desirable although they are more rampant now than ever before and this is partially due to the weakening regulatory systems.

REFERENCES

Haverkort, B., Hooft, K van 't and Hiemstra, W. (2002). Ancient roots new Shoots: Endogenous development in practice. Zed Books, London.

Haverkort, B. and Rist, S. (2004). Towards Co-evolution of knowledges and sciences Bridging local and global systems. (unpublished)

Millar, D. (1996). Footprints in the mud: re-constructing the diversities in rural people's learning processes. Ancient roots new

Shoots: Endogenous development in practice. Zed Books, London.

Millar, D. (2004). (In-print). Endogenous Development: Some issues of concern. Ghana Journal of Development Studies, 2 (1). Development Journal - FIDS/ UDS.

Rist, S. (2002). Si estamos de buen corazón, siempre hay producción - Caminos en la revalorización de formas de producción y de vida tradicional y su importancia para el desarrollo sostenible. La Paz, Ediciones PLURAL - AGRUCO - CDE.

Rist, S. and U. Wiesmann (2003). Mythos, Lebensalltag und Wissenschaft im Berggebiet - eine Einführung. Welt der Alpen - Gebirge der Welt, Ressourcen, Akteure, Perspektiven. F. Janneret, Wastl-Walter, D., Wiesmann, U., Schwyn, M. Bern, Paul Haupt: 159-169.