



Social Learning Processes and Nature-Culture Relations of Commercial Beekeeping Practices as Small and Medium Enterprise Development in Zimbabwe

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Abstract

This paper explores social learning processes and nature-culture relations in a context of transition from traditional to commercial beekeeping in Zimbabwe. The contours of social learning provided by Wals (2007) are used to probe the learning processes in the social interactions shaping an emerging community of commercial beekeepers and their small and medium enterprise development practices. The paper illustrates how the practice of engaging communities in participatory expansive learning research could benefit from more refined tools for understanding the open-ended contours of social learning interactions in relation to nature-culture relations.

Introduction

In order for us to understand our environmental problems and how they came into existence, it is necessary to examine our current histories of nature-culture relations (Norgaard, 1994; Head, 2000). Co-evolutionary environmental history or cultural landscape analysis are used as approaches to explore nature-culture relationships assumptions. Co-evolutionary environmental histories or cultural landscape analyses reflect relational perspectives that consider the relationships that exist between humans and nature/environment. At one end of the continuum, environment can be viewed as a pool of resource inputs that is transformed by scientific technological development in pursuit of satisfying human needs; while the other end of the continuum environment can be considered as a complex and biological system rather than a stock of separate resources, causing species to be transformed between environments as humans interact with them in the process of trade, colonisation and development (Norgaard, 1994). Using this continuum I will analyse the history of co-evolutionary/cultural landscape assumptions contained in the learning and development of beekeeping practices in Buhera South, Zimbabwe, and I will conclude by engaging the social learning contours provided by Wals (2007) in understanding the role of learning in resolving challenges of divergent ideas of nature-culture relations.

Historical Analysis of Beekeeping in Buhera South

In Zimbabwe honey hunting, subsistence beekeeping and trade of hive products has a long history which can be traced back well before the arrival of the first settlers in the late 1800s. The

presence of diverse vegetation, subtropical climates, high levels of poverty and increased honey demand became the driving forces behind sustaining trade of honey and commercialisation of beekeeping systems in the country (Nel & Illgner, 2004). Beekeeping also has several merits which resonate with sustainable development discourse, especially around environmental, societal and economic sustainability. In this paper I will start by tracing the history of beekeeping and how it emerged from colonial to contemporary Zimbabwe.

The coming of colonisation, the emergence of the white mining industry and the expansion of markets for both labour and agricultural products meant a new order for trade in Zimbabwe in the early to mid 1900s (Andersson, 2002). As was reported by Phimister (1974), this period of the early to mid 1900s was marked by the negative response of black Rhodesian¹ societies to the state's new economic systems of taxation to mobilise labour, as people were placed under strain by tax demands. People would sell grain, livestock, beer and other products especially to mine workers to meet their tax and other livelihoods needs (Phimister, 1974; Andersson, 2002). As was noted by Andersson (2002), in Buhera South where there has been a history of recurrent droughts, many people were forced to sell cattle not just to meet their food requirement but also to pay for tax. But what about households with no livestock? Natural-resources products – especially beekeeping – became people's safety net in earning a livelihood, as was reflected and retold by 87-year-old Headman Mushumba (Chapanduka, pers. comm., 2 January 2010). This period marked another co-evolution of learning beekeeping practices, as beekeeping was no longer a subsistence practice, but had been transformed to a small and medium enterprise commercial business by poor households with no livestock. Beekeeping practices had therefore co-evolved through learning to make and manage hives, and harvest, process and store honey in a state which would allow transporting it over long distances to trade centres such as mines and farms.

The gaining of Zimbabwean independence in 1980 brought about black majority rule, which created a new society with equality in terms of employment, wealth, education and social security (Sylvester, 1985; Dhliwyo, 2001). Government policies were aimed at narrowing the economic gap between racial groups through the provision of free social services such as education, health facilities and housing, facilitating heavy government cash injections and subsidises into the agricultural sector. Especially significant was the shifting of rural people's farming practices from production of staple crops to cash crops such as burley tobacco, groundnuts and cotton (Sylvester, 1985). In Buhera South there was a shift from conventional livelihood strategies that had sustained poor people during the crucial moments of colonisation – such as beekeeping – to cash crop production such as cotton and red sorghum which were being grown on forward and backward contracts.² This marked another co-evolutionary moment as such crops demanded that farmers of large pieces of land use of fertilisers and pesticides which were readily available at subsidised rates. Learning beekeeping at this time had to co-evolve into a peripheral livelihood activity – practised by only a few enthusiasts as bee forage and healthy bee populations were negatively impacted by forest clearance and heavy use of pesticides, respectively.

The post-independence economic growth was not fast enough to absorb a rapidly growing young labour force, nor sufficient enough to generate the tax revenue for continued

expenditure on basic social services (Dhliwayo, 2001); for policy-makers it meant going back to the drawing board. By November 1991 the Economic Structural Adjustment Programme (ESAP) was launched as a strategy to resuscitate the ailing economy (Dhliwayo, 2001; Addison & Laakso, 2003). The objectives of ESAP were to liberalise key markets, reduce the fiscal deficit by cutting budgetary support to some social and economic services such as education, health, and agriculture subsidises (ibid.). Despite ESAP benefitting some sectors of the economy it was a major blow to the poor majority. The drought of 1992, high inflation and importation of cheap textile products lead to loss of jobs, productive assets and investments (Addison & Laakso, 2003). To rural Buherans this meant looking for sources of livelihood to fall back on other than those that had now become 'traditional', i.e. cattle, cotton and remittances from towns. The easiest was to turn to natural-resources products – beekeeping. Beekeeping changed its status from being a peripheral livelihood strategy to once again becoming a core enterprise activity. The main reason why beekeeping was suited to co-evolve was that it was a low-cost practice and drought resilient; hence providing food and money for school fees, health and other social services.

The realisation of beekeeping as a key livelihood activity also coincided with the formation of non-governmental organisations (NGOs) whose aim was to improve livelihoods of the rural poor through sustainable utilisation and management of natural resources, such as the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) Association, the Southern Alliance for Indigenous Resources (SAFIRE) and the Zimbabwe Farmers Development Trust (ZFDT). This was another co-evolutionary moment in Buhera South, as support to beekeepers by ZFDT favoured consolidation of learning as a key livelihood activity. A number of people started to learn beekeeping as a commercial business again, however with support from an external agent which was using modern technologies to improve honey productivity, natural resources management and marketing within a small and medium enterprise development frame.

With the dawn of the 1990s economic challenges and civil unrest continued and there was loss of support for the ruling party, the Zimbabwe African National Unity Patriotic Front (ZANU PF), as their economic policies were seen to be failing. A new political party – the Movement for Democratic Change (MDC) – was formed (Addison & Laakso, 2003). The MDC's main support base was the 'born frees',³ the working class, the urban populace and white commercial farmers who expected an alternative party to bring back the ailing economy. According to Addison & Laakso (2003), this was one of the main reasons for the highly politicised land redistribution programme – the land invasion. ZANU PF wanted to win rural people's votes through resolving the long outstanding land imbalances and on the other hand to fix white commercial farmers who were one of the main wings of the MDC. The data collected by this author from Buhera South suggested that land invasion affected learning of beekeeping practices negatively – not because the rural Buhera was invaded but because of the interpretation of politically motivated land invasion slogan, '*Land is the Economy and the Economy is Land*'. To some Buherans who were not beekeepers the slogan indicated that use of any land available to cultivate crops was the only way to be economically independent. This led to practices of cultivating anywhere, even in the legislatively controlled and ecologically

sensitive areas. This was a problem for beekeepers, as such land had been traditionally reserved for beekeeping, a practice which they had learned co-exists and co-evolves with ecologically sensitive areas. It therefore meant a contradiction in practices – a contradiction embedded in conflicting uses of the ecologically sensitive areas.

The following sections outline the methodology of the research conducted with beekeepers in Buhera South as I answer the research question: ‘How do rural beekeepers learn commercial beekeeping?’ I will outline how Wals’ (2007) contours of social learning processes were used to resolve challenges of divergent ideas about implied nature–culture relations in the use of ecologically sensitive areas (stream banks) in a community workshop. Engeström (2001) explains that such contradictions are potential sites of learning, and it is this factor that interested me in the context of expanding the social learning of commercial beekeepers in Buhera South.

Methodology

As indicated above, a substantive part of the research involved developing a historically informed picture of the commercial beekeeping activity system so as to identify contradictions and tensions that emerge in the commercial beekeeping activity system. This process drew on the frameworks for such research provided in Cultural Historical Activity Theory (Engeström, 2001) where rules, subjects, community members and mediation tools are analysed historically and culturally to identify contradictions within or between these elements of an activity system (see also Mukute, 2009). As indicated above, I identified a contradiction in the object of two interacting activity systems; namely, the beekeeping activity–system players and the other farmers, both of whom wanted to use ecologically sensitive areas for their livelihood activities.

To resolve the challenge of different nature–culture views on use of stream banks in Buhera South, I took the research into an expansive learning cycle phase, involving the reporting of ‘mirror data’ to the communities. To do this I held a community expansive learning workshop⁴ for the key actors involved; namely, beekeepers, farmers, traditional leaders, agricultural extension officers and local teachers at Chapanduka Primary School in March 2010. The workshop was meant to develop a collective understanding of commercial beekeeping as a livelihood activity and stimulate expansive social learning, as proposed by Engeström’s (2001) expansive learning methodology. The entire expansive learning workshop was recorded using video and audio tape recordings and data was carefully transcribed afterwards. As Glasser (2007) pointed out, social learning involves individuals and groups learning by getting input from others, such as in a community workshop. To help me understand and interpret the social learning interactions of the community workshop, I used the first four of Wals’ (2007) six social learning contours as an analysis tool. Wals (2007) describes six contours of social learning processes:

- *Orientation and exploration* – open-ended social processes of learning together through the identification of key actors and exploring with them key issues of concern that need to be addressed in a way that connects their prior experience and backgrounds to learning commercial beekeeping, enabling the emergence of motivation and a shared sense of purpose.
- *(Self) awareness raising* – learning processes where beekeepers as individuals elicit own

frames of reference relevant to issues and challenges in the learning of commercial beekeeping.

- *Deframing or deconstruction* – learning through observation and taking note of key actors' articulations and how these challenge other's frames through a process of exposure to alternative frames about the practice of commercial beekeeping.
- *Co-creating* – learning by observing and taking note when key actors' ideas are constructed and clarified together.
- *Applying/ experimenting* – key actors are expected to learn through looking at collaborative action using the newly co-created frames for commercial beekeeping.
- *Reviewing* – Key actors will learn by assessing the degree to which the self determined issues or challenges in their learning of commercial beekeeping have been addressed, and also review the changes that have occurred in the way the issues/challenges were originally framed, through a reflective and evaluative process.

Data Analysis and Discussion

Learning as **orientation and exploration** was observed when the topic was introduced. There was a concern that the workshop participants had failed to discuss the problem of use of land the previous day after learning that there was a missing key actor – the traditional leaders. See the discussion interactions in data extracts 1 and 2 below:

Extract 1: ... The other issue which we need to discuss and we need traditional leaders to help us with is tree cutting and opening of new cultivation lands.

Extract 2: On that issue we agreed that village heads should be there because they are the ones allocating cultivation land along rivers hence promoting stream bank cultivation.

The facilitator opened the discussion based on the discourse of the previous day reflected when participants had learned that a missing key actor was significant, as indicated by participants in the previous day's discussions. This process highlighted the background and roles of key actors involved in the contradiction, but it also excited key actors to contribute to the discussion, especially traditional leaders who were absent the previous day when a discussion of the contradiction was introduced in the mirror data reflection process. This opened up the discussion in the workshop into a second dimension of the social learning process as described by Wals (2007) namely **(self) awareness-raising**.

Learning in **(self) awareness-raising**, according to Wals (2007), involves seeking to elicit one's own frames relevant to the issue or challenges identified – in this case, different approaches to use of ecologically sensitive land to support household livelihoods. As the traditional leaders had been identified as key actors and brought into the workshop on the second day, they were also motivated to put the record straight as to why the contradiction existed (see data extracts 3 and 4).

Extract 3: *I would want to say it had been always like that we don't cultivate along rivers. When we went for training the government encouraged us to put hives along rivers and in mountains. We were advised not to use flat land because farmers would want to use it to cultivate crops. ... But it varies with the different village heads, one villager might decide to put a vegetable garden along a river, his village head must advise him that it's not possible to clear trees along rivers but ... (making a bribery gesture) and the person goes ahead.*

Extract 4: *So headmen and village heads are not doing their work properly because of corruption. However some traditional leaders like me and others I know, such as the local headman, we are trying our best. I might not be aware of everyone, but I haven't allocated cultivation land along river in my village, because I learnt about natural resources management. If we destroy trees where would we get honey? This means as village heads we are failing to control people from cutting trees along rivers, we can see it happening ...*

The two discussion interactions above show how the contradiction is understood by a village head who is a beekeeper – he believes that traditional leaders have a hand in the activity because of corruption. Key actors have also learned that traditional leaders need money because they are ordinary citizens and some are even poorer than the ordinary villagers they lead. Rich villagers are therefore exploiting them through bribery and they access land along rivers, a practice the beekeeper traditional leader highlighted as being unacceptable in his village.

However, another traditional leader who was not a beekeeper viewed it differently. He noted that the problems arose because of population increase; that 'people are squeezed' and they no longer had anywhere to cultivate. There were many children who grew up in the area, and also sometimes people coming from outside. This point is also raised in the work of Dhliwayo (2001) who highlighted jobs losses associated with ESAP in the 1990s as a cause of land pressure, and the work of Tibajuka (2005) who highlighted the impacts of 'Operation Murambatsvina' in Zimbabwe in May 2005 when so-called illegal activities such as vending, building and agriculture were destroyed in urban areas by the government and more than 700 000 people were left without shelter. This caused people to flock to rural areas, creating land use pressure in the rural areas. More learning happened when the issue was clarified further; see discussion extracts 5–9:

Extract 5: *What is happening is a result of the population increase. There are some areas that were not suitable for human settlement, but you end up settling people because of shortage of land. The population increase is putting pressure on our forest and they are now finished.*

Extract 6: *Where are these people coming from?*

Extract 7: *Our children.*

Extract 8: *Are there some people who are coming from other areas?*

Extract 9: *They are there, but they are very few however most of the population are our children who grow up in this area.*

As indicated above, the reasons were given by the traditional leaders. Consequently, key actors understood the contradiction at hand from the views of the traditional leaders, until some other key actors intervened. The Agriculture Technical and Extension Services (Agritex)⁵ officer initiated further discussion on the issue, which introduced a third dimension of the social learning process as indicated by Wals (2007), namely **reframing and deconstruction**.

Extract 10: *I would go back to the government's position, long back as civil servants we had the powers that if a person cultivate within 30 meters from the river, we would arrest... These powers were stripped from us, it would mean they need to be restored, and also with the divisions which were done in various departments ... and you should work within your department's confines. If you look at stream bank cultivation we can also report to department of engineering, this is no longer our role ... That problem of stripping of powers. ... long back we had the powers to arrest the culprits.*

The government agricultural extension officer deconstructed the way key actors had learned from traditional leaders. They were now learning how state intervention had exacerbated or even led to the problem through responsibility withdrawal. This was supported by literature from the Zimbabwe Ministry of Agriculture and Rural Development website⁶, which showed that since 1992 soil and water conservation was a function of the Department of Engineering and Technical Services not the Department of Agriculture Research and Extension (where field extension officers are placed). However, other actors deconstructed the contradiction as participants learned that manifestation of national politics in Buhera South was extending the problem. Participants also learned that the manifestation of national politics in Buhera South was causing the problem of controlling stream bank cultivation (see interaction extracts 11–14).

Extract 11: *The other thing which caused this problem is number eight [meaning number eight of the list of beekeeping challenges on the mirror data flip chart, which was politics]. It caused problems in implementing legislation. It is now difficult to control people in this area because they would ask you who said that, and who doesn't allow it.*

Extract 12: *Number eight politics.*

Extract 13: *Yes, that is the catalyst to the problems.*

Extract 14: *In this area, it has a lot of impact because you will be politically labelled. You either belong to political party A or political party B.*

As national politics manifested itself in Buhera South it caused community polarisation. Some people supported ZANU-PF and its slogan '*Land is the Economy and the Economy is Land*' and there was subsequently a belief that anyone who interferes with them in achieving the land

agenda was an enemy and should be labelled a MDC supporter. It also meant that all those who were against it were being politically victimised by ZANU-PF supporters through the leadership of liberation war veterans who had become very powerful overnight, especially in rural areas. Such action made it difficult for traditional leaders and civil servants to implement environmental legislation.

Therefore deconstruction really helped in understanding the contradiction through the unfolding of history and getting to the core of the problem. Some village heads started to ask Agritex officers for help in solving this problem. Extracts 15–17 show how they were calling for assistance as the workshop now engaged in another dynamic of the social learning process, namely **the process of co-creating** and proposing solutions.

***Extract 15:** As beekeepers how can traditional leaders help us to solve this problem?*

***Extract 16:** I think the way for this issue to be solved, is to have a meeting with the headman to discuss the way forward for the problems we are facing.*

***Extract 17:** Yes, village heads would deal with the problem, however we need to discuss it with Agritex officers in order for them to tackle it, it will go back to number eight (politics) and we won't be able to handle it well; because the culprits will ask whether you own land. When it is presented by Agritex officers and they call for village meetings ... and remind people what the legislation says about stream bank cultivation, then village heads...can now start to prosecute.*

This type of talk by one village head who was grappling with the problem can be described as 'agentive talk' – the willingness to address the contradiction (Mukute, 2010) even though he knew that there was political inference. That was the reason why he was calling for the Agritex officer to intervene first through educating people about the environmental legislation. Although the Agritex officer concurred that traditional leaders were at the centre of the problem and they were supposed to address it, workshop participants learned that he was not willing to be involved in educating people about the legislation because of the political environment, as is reflected in extract 18.

***Extract 18:** ... I therefore think that for this problem to be resolved it requires the involvement of headmen who were officially installed by the state, and possibly the District Administrator (DA) their supervisor, and all village heads should be present. This issue can be discussed if a village head cannot control his people he will be stripped of his post. This is the best way to solve this issue; the weakness which they have is they are not exercising their authority. Some of the people are corrupt to the extent of giving land to people who are coming from Chatikombo (faraway places). Us as extension officers we have been stripped of the roles of controlling stream bank cultivation if we intervene we will be labelled number eight (politics) we are therefore facing hard times ...*

This village head was not necessarily defeatist, and was also engaging in 'agentive talk' suggestive of another strategy – namely, the involvement of government officials from higher office: the

District Administrator (DA). By suggesting the intervention of the DA, participants learned that he was powerful because he was the boss of traditional leaders and district administrators were instrumental in the land reform programme; hence they were better able to explain the environmental legislation in the given new socio-political order.

This was further supported by discussion extracts 19–26 as the Agritex officer showed further willingness to solve the problem by pushing for the invitation of the DA, Forestry Commission, Environmental Management Agency and Agritex officials from the district offices to a meeting where people would be educated about stream bank cultivation. This showed further evidence of ‘agentive talk’. There were also expectations of relational agency (where agents were to work together to resolve the contradiction), as it was made clear that traditional leaders were later expected to start executing their duties of managing the environment as outlined in the Traditional Leaders Act 25 of 1998 (Ministry of Local Government and National Housing, 1998).

Extract 19: *Are we agreeing? Village heads, can we call the DA so that we can have a meeting?*

Extract 20: *Yes, officers at our district offices of Agriculture they are not a problem, all those people in higher offices are not a problem.*

Extract 21: *Who will invite them? Who will call for a meeting?*

Extract 22: *We can invite all district stakeholders there is no problem.*

Extract 23: *We are agreeing that Agritex officers will call for the meeting and officials in their district offices will be present. The district officials from Agritex can also extend the invitation to the District administrator.*

Extract 24: *If the DA is coming the Agritex officials from the district office will also be present, however if we would want to have this meeting we need to invite them in time for them to schedule the date in their dairies.*

Extract 25: *We think if we call the DA, he will come with other officials from Forestry commission, Environment and not only Agritex will be invited, and even police officers will be invited.*

Extract 26: *Yes, this job will be for the state.*

Conclusion

The social learning trajectories above reveal a collective development of goals towards solving a common problem in a further stage of the co-evolution of commercial beekeeping in the Buhera South case study site, where this research took place. In the learning processes distributed knowledge – divergent nature-culture views on the use of ecologically sensitive

areas – existed and interacted in a learning process oriented towards understanding learning and sustainable development issues in the context of commercial beekeeping taking place in a complex social-ecological context (Lotz-Sisitka, 2009). As described above, the expansive social learning process was facilitated to engage multiple stakeholders in resolving a contradiction that was surfaced through long-term historical analysis of commercial beekeeping practices in Buhera South, using Cultural Historical Activity Theory which proposes analysing social activities and the sociological, political and contextual histories and cultural practices that lead to the formation and contemporary practicing of such activities. Cultural Historical Activity Theory also proposes that arising contradictions are important sources for expansive social learning, and that this can be facilitated through strategies such as community social learning workshops, as was the case in this research.

However, Cultural Historical Activity Theory does not provide adequate tools for interpreting the learning process, although some tools such as analysis of agentive talk (Mukute, 2010) and others are being developed (see Mukute and Lotz-Sisitka, in press). Wals (2007) proposes a dimensional process model for understanding social learning which is grounded in an understanding that social learning when oriented towards sustainability involves dissonance, or engaging with complexity and contradictions. Following the discourse of a community of practice in an expansive learning workshop in the way that I have done, and reported on above, shows the complex nature of social learning processes, and also the various dynamics of a social learning process interaction. In her paper on environmental education in southern Africa in a context of heightened risk and complexity, Lotz-Sisitka (2009) notes that social learning processes are likely to be reflexive learning processes. This analysis of talk in an expansive social learning process demonstrates some of the dynamics of such reflexive social learning. As indicated in the historical analysis and in the micro-level workshop analysis above, learning commercial beekeeping in Buhera South has features of such reflexive learning processes in the longer term, but also in the shorter term, more immediate learning interactions oriented towards solving contemporary problems affecting the commercialisation of beekeeping. The analysis also shows that social learning involves a complex mix of historical, technical, political, economic and ecological factors which are contextually ‘woven’ together in different co-evolutionary patterns over time as circumstances change and as people exercise learning and agency in response to the challenges that arise as circumstances change.

Notes on the Contributor

Christopher Masara is an environmental education and community-based natural-resource management practitioner working in Zimbabwe. His research and practice interests include social learning and sustainable use of non-timber forest products; and commercialisation of natural resources at small and medium enterprise level. This paper is one of two case studies analysing workplace learning in small and medium enterprise development (beekeeping) in two southern African sites. E-mail: chriss2002003@yahoo.co.uk.

Endnotes

1. Rhodesia was the name for Zimbabwe under British colonial rule.
2. 'Forward and backward contracts' relates to the practice where by inputs and market are provided to farmers in order to stimulate production of a certain crop, mostly by private companies.
3. 'Born frees' are children born after independence.
4. Also known as a Change Laboratory Workshop after Engeström's expansive learning methodology – see Engeström (2001) and Mukute (2009) for more detail on how this methodology has been used to support expansive social learning in southern Africa.
5. Agritex was formerly known as Agriculture Research and Extension Services (AREX).
6. <http://www.moa.gov.zw>, visited 25 May 2010.

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