

Master's thesis



# An Exploratory Study of a Situated Learning-to-Change Process in Three Eastern Cape Coastal Communities

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## **Declaration**

I hereby confirm that I am the sole author of this thesis and it is a product of my own academic research.

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December 1, 2009

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# **An Exploratory Study of a Situated Learning-to-Change Process in Three Eastern Cape Coastal Communities**

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Using a Communities of Practice (CoP) framework, this study set out to engage competing coastal resource users in purposeful learning interactions towards more sustainable resource use. Awareness creation and law enforcement have been the dominate way of addressing coastal conservation problems, creating a paradoxical situation where people understand the problems but are unable to do much to reduce their pressures on resources. This is creating a conflict between tourist brokers and the communities in question. These challenging realities gave rise to this appraisal of current coastal context and exploration of purposeful local initiatives to reduce competing interests that are currently depleting coastal and marine resources. Here the interests of the subsistence harvesters were fore-grounded in a local networked learning innovation ('heritage, habitats and home-cooking') innovation to enhance the value of resources harvested and thus to bring more income in/to the rural contexts of the study. Backpacker establishments as tourism brokers were identified as the networking hub to support the purposeful engagement of local resource harvesters toward sustainable resource use likely to reduce ecological impacts on a local level, hence 'learning-to-change'. The two backpacker establishments and the community project that were dealt with already had community engagement track records but had yet to optimally integrate subsistence resource users in tourism and education activities that benefit them whilst reducing pressure on coastal resources. More awareness programs did not seem particularly fruitful, so a purposeful engagement of subsistence harvesters was undertaken to probe local change orientated learning and co-engagement using a community of practice approach that engaged the previously contesting groups in networked learning. Preliminary findings suggest that purposeful networked learning with tangible benefits has potential for developing the agency necessary for resolving the current paradox.

## **INTRODUCTION**

While a strong legislative framework for coastal resource management should be the scaffolding that a community leans upon to support sustainable coastal resource use, reality tends to never be as straightforward as that. Currently state initiatives that promote coastal tourism and new policies to protect coastal resources in the Eastern Cape are, in effect, working against each other as subsistence users and tourism has demanded access to a diminishing coastal resource. Use of coastal resources has reached a level of non-sustainable environmental and economic activity.

There is little community engagement around coastal resource use except through media; information materials, signage and a once a year coastal clean up campaign (awareness) that are accompanied by the enforcement of regulations (compliance). McKenzie-Mohr (1999) points out that initiatives that rely solely on providing information have little to no effect upon changing behaviour and the scale of the problem on the East Cape coast is making compliance work almost impossible.

The ineffectiveness of awareness campaigns and the failure of adequate compliance policing was clear to me in the research sites. Local coastal resource users have a good understanding of the regulations but this is not reflected in the patterns of livelihood harvesting practices. This comes as no surprise as there has been extensive research into the fruitlessness of attempting to change community behavior with awareness campaigns alone as outlined by Gardner and Stern (2002). Jacklin and Vale (2009:8) describe how, in a post-apartheid South Africa, a modernist notion of management has ordered the social world by assuming a technical authority and control that was lacking. Coastal management authorities have thus sought to change things through strategic interventions (awareness and compliance) that have not had either the social authority or control to effect the desired change in behavior. The absence of purposeful engagement, particularly in the case of subsistence harvesters, has thus left many locals in the paradoxical state of having no alternative other than to harvest what they can and try to sell their catch to tourists for added value.

Rather than rely on the traditional methods of technical coastal management built around scientific baseline studies and monitoring to inform policy that is communicated and enforced, this study explores an extension of this to **purposeful local engagement in networked learning to change**. This approach is centred on

networked learning towards a situated understanding of coastal issues with value added economic opportunities for subsistence users.

The exploratory research project undertaken with local resource users aimed to examine how a network of community coastal resource education centers (CRECs) might begin to support programmes of situated learning and change that foster more sustainable resource use. The vision of this study is to extend conventional approaches to include purposeful learning in a situated Community of Practice (Lave & Wenger, 1991). The study was undertaken with two coastal backpackers and one local community project to research the issues and to pilot test a purposeful networked learning approach that included preliminary work on transforming subsistence harvesting into a value adding ‘heritage, habitats, and home-cooking’ experience. Given the exploratory nature of this project and its duration of three months, the goal of the study was simply to undertake preliminary groundwork towards a possible structure for sustainable CRECs that promote a co-engaged process of purposeful interaction in ‘situated learning-to-change’ (O’Donoghue, 2009).

The concept for this exploratory project is borne from the recent work of Davies (2009) on learning through creating environmental education materials in community-based coastal education projects. While her work shows strong promise for using picture stories and metaphor as learning tools (Davies, 2009) the agency to engage in change practices among learners is still necessary. By working from the knowledge gained through the Davies study, this research set out to engage local subsistence harvesters in exploratory change practices of their design and to probe the developing activities for evidence of agency towards more sustainable practices.



Tourism is recognized as one of the driving factors of unsustainable coastal use. Government development initiatives have tagged tourism as the panacea for creating economic development in the Eastern Cape but a viable system of economic engagement with local benefit has yet to be worked out (Visser, 2004; Palmer *et. al.*, 2009; Davies, 2009). The main objective of this research report is to highlight the lessons learned working in the preliminary stages of this project; reviewing examples of purposeful co-engagement amongst coastal resource users. The focus of the exploratory project is on the tourism and subsistence harvester relationship and the engagement of the latter in learning-to-change process that is learner led and designed to meet their economic development whilst conserving the resource.

The paper opens by relating the context and issues surrounding current coastal resource use in the Eastern Cape. It then reports my engagement at the sites of Coffee Bay, Cinsta, and Hamburg with backpackers, tourists, and local subsistence users. The uniting of these parties in a Community of Practice (CoP) to support CRECs illustrates that a CoP model of community supports purposeful engagement of subsistence harvesters in sustainable coastal use, but it also holds promise to connect with wider education and scientific communities as well.

## **THEORETICAL OVERVIEW**

To address the paradox of a reasonably high awareness of the problem and an apparent inability for this to be resolved in the context of poverty and competition for market and resources, a Community of Practice (Lave and Wenger, 1991; Wenger, 1998, 2002) theoretical framework is used to approach the question of networked learning for change. A CoP perspective notes that “Members of a community are informally bound by what they do together” (Wenger, 1998 p.2). In this case we have tourism and local subsistence users that are informally bound through harvesting

coastal resources. By recognizing and fostering the relationship tourism has with localized resource users around coastal resource use as a CoP a purposeful model of learning and resource use will emerge. Wenger (1998 p.4) suggests that a CoP provides:

- Exchange and interpretation of information
- Retention of knowledge
- Steward competencies
- Home for identities

All of these characteristics should be supported in the goals of any sort of community environmental outreach and/or education project. As Daniels (2008) illuminates there are many different takes on the effectiveness of the CoP model, especially the direction that Wenger has decided to take it away from Vygotsky traditionalists. For the purpose of this study however a CoP structure to learning was most appropriate as it allowed the definition of community to be based around those who people effect the practice of coastal resource harvesting thus creating a networked learning experience with traditionally alienated groups.

The learning structure of a CoP holds knowledge at the core and learning interactions at boundaries creating a ‘distributed cognition’ though the community. The practices of a CoP are situated in one’s role as a member of a community (Somekh, 2005). In building a recognition of the participation of tourists and local resource users in activity systems of coastal resource use, a shared understanding can be gained and common language developed. Learning will happen when moving from peripheral participation to more intense levels of activity and contribution to the ‘practice’; this starts through observation and participation with core leadership (Daniels, 2008). Wenger (2002) explains the different levels of participation and relationships represented here by Figure 1. This figure defines the different levels of

participation and contribution to a CoP and the roles that are attributed to the different parties of the CoPs fostered through this pilot study. Groups and individuals will be constantly shifting through these levels of participation with time and need allowing the CoP to be a dynamic system.

Wenger (2002) outlines the principles for cultivating a CoP (fig.2), by working with these principles the CRECs will be designed to be dynamic centres that can extend the conventional awareness pamphlet and poster hub to local learning to change initiatives.

[FIGURE 1]

[FIGURE 2]

Working with a CoP approach from initial interview discussions towards a co-engaged change practice allocates a refined differentiation of the interests and pressures amongst the different community interest groups. Yet, at the same time the theoretical framework allows for the interest groups to be seen as working in a networked community of practice around the same resource. This permits the study to approach the prospect of creating a more sustainable community through exploring purposeful resource use practices to enhance economic return with less damage to the resource base and with an emergent agency to sustain this change.

The viability of such a framework was tested by monitoring and interpreting speech and practices at the sites of different user groups for evidence of agency towards supporting a CoP. This process allowed the study to support the purposeful framing of a CoP and to probe this for insight into the viability of such a model for different local situations.

## **RESEARCH METHODS**

The study was undertaken as an open-ended process of critical description and abductive interpretive analysis with local interest groups. This approach allowed for

the constant reconstruction that is needed to work with the dynamic nature of the study's context and investigation of CoP formulation at each site. It was developed in three phases:

- 1) *Information Building* on coastal and marine environment through document analysis and interviews with relevant experts and interests groups.
- 2) *Local Interviews* to identify local, small scale learning activities that are purposeful in that they enhance economic return and reduce the pressure on the resource.
- 3) *A Review of Evidence* for the potential enhanced economic return and local agency towards more sustainable resource use hypothesized by the situated networked learning CoP.

***Information Building:***

Documents and media were collected from Share-net, the South African Institute for Aquatic Biodiversity (SAIAB), and the Department of Ichthyology and Environmental Education Unit at Rhodes University that have been created for the purpose of coastal environmental education. This included: Coastcare factsheet (2001), EnviroFacts (1999, 2009), Share-net eInfo CD, Coastal Fishery Resources: An Easy Guide (2007), SASSI Consumer Pocket Guide (2007), and Environment and Tourism Programme for PSJ-Coffee Bay Hiking Trail Trainers and Learners Guide.

These documents and media were analyzed and found to offer an exhaustive amount of information around the South African coastal issues and environments. Other documents included a site-specific training manual for engaging local community involvement with tourists and environment, and a newly created programme for municipal government in engagement with co-management over coastal resources. Other than the Environment and Tourism Programme, all materials were in English. Interpretive signage initiatives at all study sites were found to be based on information compiled in the Coastcare factsheets (2001).

Interviews were conducted with ten identified experts on legislation and management, environmental education initiatives, the environmental status of the Eastern Cape coastline, and the social state along the coast (table of interviews in

references). Interviews were transcribed and coded to build the context of this study and to identify associated issues around coastal resource use. Since this study is seeking to integrate several different groups of stakeholders in an activity system using a CoP approach, it was important to build a picture of their common history and issues working with them in each local context.

### ***Local Interviews and Small Scale Co-engaged Pilot Studies***

Three sites were identified during the information-building process: Coffee Bay, Cinsta, and Hamburg, each with their own coastal resource use issues and relationship with coastal tourism.

Initial 1 to 2 day visits were made to each site to begin building site profiles, to gauge project interest, and to identify whether there was the atmosphere of agency present needed for CREC creation. This process involved interviews with the management of Coffee Shack Backpackers, Buccaneer's Backpackers, and a Project Manager of the Keiskamma Trust Art project. Conversations were also held with other tourism brokers and coastal management authorities in the area of each site to explain the project intentions. Extended five day site visits were subsequently planned where further work on seeding the CREC took place. Work at each site was informed by previous site visits. The extended visits included semi-structured interviews on and observation of coastal use practices as well as observation of current tourist-local resource user interactions towards co-engaged photographic narratives and exploratory work to probe the emergent CoP and CREC concept. It was important to profile what coastal user groups were in the community already, what their use was, and their relationship with one another. The presence or absence of coastal use by different community stakeholders, be they subsistence harvesters, tourist brokers, or

recreational users, shows who is part of the ‘practice’ already among the CoP and will effect the evolution and pace of a CREC development with the CoP model.

The work with multimedia and guided tours are around site-specific environmental issues and use. One or more coastal resource uses were identified at each site. Local resource harvesters were identified to tell their story of sustainable coastal resource use. Pictures and short video clips were then taken with direction from the local resource user to create their own story of sustainable use practices. The audio track and picture story of sustainable resource use were then compiled into a simple movie format provided by the Sustainable Seas Trust.

These videos were then brought back to each site and reviewed by the local resource user for comment and analysis of the viability of the emerging change practice and what is needed to take the process further.

### ***Evidence Review***

Each of the previous two procedures is synthesized in different formats.

The context of the study is in two parts, the first a macro coastal networked learning context and then the related micro site level issues focusing on the local resource user and tourism interactions in six categories: politics, economy, society, technology, environment, and legal (a common PESTEL issue analysis).

Nkaska (2006) notes that the key to a sustainable community project is leadership and social cohesion. When working at the study sites the presence of agency from core leadership is necessary for the successful cultivation of the CoP. This was examined by an assessment of the exploratory process for evidence of agentive talk and actions in relation to the purposeful ‘learning to change’ focused activities. As identified by Sannino (2008) the main interlocution cues of agency are committal and doable optimism. This study also looks into language that ‘envisions

new models', such as that which Engeström (2008) identifies as the third form of agency (Mukute, 2009). By coding for this talk one can determine "a process through which individual disposition to act is prepared". The presence or absence of agentic talk from different involved parties will show whether or not a party is ready to be part of the core leadership of the CoP. Likewise, they can start out as a peripheral observer and with practice moving toward active group or core leadership. While the main activity here has been to create materials 'for' and 'with' sites, in taking direction from, assessing speech patterns, and recognizing certain actions there lies the possibility of material creation 'by' sites that shapes agency within the CoP.

## **RESULTS**

### ***Phase 1: Information Building***

#### *The Context*

In order to work in engaging communities it was important to understand how the context of current practices developed. The Eastern Cape is perhaps best known for its history of abject poverty worse than any other South African province that continues to this day. During apartheid the area was a labour reserve and has lagged behind development of the rest of the country since (Palmer *et. al.*, 2009). Other than the large holiday homes and small scale tourist centers dotting the coast, there is not much means for economic gain along the coast enticing many young residents to the cities of Mthatha, Port Elizabeth, and East London for jobs. This, and because of the high incidence of HIV/AIDS in the area, finds many households consisting of grandparents caring for a large family unit. One is also very likely to find mainly female-run households in this context (Palmer *et. al.*, 2009).

Post-apartheid Spatial Development Initiatives (SDI) and subsequent reformulations (Wild Coast SDI, 2001) have turned the focus of the province to

small-scale community-based tourism projects for economic empowerment with little luck thus far (Ashley, 2002). The main effect tourism has had on the coast is to drive the demand for coastal resources. Traditionally the Xhosa of the area, like most Nguni people, were pastoralists who primarily used coastal resources on a seasonal basis. The marginalization of annexed Xhosa along the coast helped drive the consistent use of coastal resources. Besides a source of food, the development of coastal tourism lead to a higher economic value to harvesting mussels, crayfish, oysters and the like driving a harvesting industry. To this day, seafoods are not popular amongst Xhosa and tend only to be consumed by the most marginalized subsistence harvesters who do not have another livelihood resource base (IB5; IB8).

Backpacker tourism has yet to be the focus of any initiative despite its huge potential. Backpackers tend to be mostly western Europeans on either gap years or extended retirement trips. A greater percentage of backpacker tourists visit the Eastern Cape than traditional 'western' tourists. Backpacker establishments, a form of pro-poor tourism, allow for a wide spectrum of people to travel South Africa cheaply, thus extending their stay in the country and in the end spending much more money than the average holiday season tourist. Backpacker establishments are becoming increasingly profitable with the potential to bring in about 32 million Rand annually each at full capacity (Visser, 2004).

The coastal and marine zone is currently covered by several series of legislation including the Constitution Act (1996), the ICM bill (2006) which is currently under review, the Marine Living Resources Act (MLRA, 1998), and the National Environmental Management: Protected Areas Act (2003). Local coastal management falls to Marine and Coastal Management (MCM) under the Department of Environmental Affairs and Tourism. Though local communities have the option to



co-manage their resource, this is rarely done. Most management has been contracted out to conservation agencies, while MCM sets out Fisheries Control Officers (FCOs) affectively relegating itself to fishery management (IB5).

The means of community engagement are meager with most education initiatives addressed at school children (IB9) or tourists (IB2). Several smaller scale initiatives have taken place such as mussel rehabilitation projects in the Port St. John's area and efforts from various researchers and universities such as Walter Sisulu University in Coffee Bay, are working on community-based education and monitoring coastal use (IB8). For the most part though, there has also been close to no coastal baseline studies and monitoring in the area. As the managing director of SAEON (IB1) so aptly put it, "Science does not *yet* point to one group as the culprits".

### *Issues*

The context of the study helps to bring out many of the issues the CREC structure hopes to deal with. Firstly, the endemic slow-growing populations of wildlife along the Sunshine and Wild coasts need to have some sort of protection from the over exploitation they are currently subjected to (IB1). The current permitting system for recreational and subsistence harvesters acts more of a fund raising scheme than an actual means of protecting ecosystem stability. The current permit system works to disenfranchise subsistence harvesters from selling seafood along the coast to retailers, turning many people into poachers (IB2). Backpackers and hotels feel either constrained by legislation to support local communities, or ignore laws at risk of heavy fines to continue to cater to tourists' wants. Many tourists are observed to believe that the Wildcoast's ecosystems have been largely unaffected by man due to massive campaigns marketing the 'pristine' nature of the coast.

The three groups harvesting resources on a local level: commercial, recreational, and subsistence all have a history of latent tensions with each other in a constant battle of blame over depletion. There is an absence of capacity for government officials to deal with these tensions. Vacant positions, lack of education, and expansive areas, prevent local managing officers from doing anything other than enforcement. While there are currently some initiatives of purposeful community resource engagement, many past programs became burdens rather than the advancement they were meant to be, leading to a disenchantment of outside agencies promises along the coast (IB7). The fragmented and separated engagement of stakeholders has done little to promote sustainable community stewardship of coastal resources positioning this study as a revolutionary approach to community coastal resource management.

### ***Phase 2: Co-engaged Pilot Study***

Each site though profiled for its similar rural context with a Xhosa and backpackers tourism interface is different by nature due to slightly differing histories and post-Apartheid reactions to develop each community. While the values and culture of people at each site are similar the dynamic effects of each separate context yields different results.

#### *Coffee Bay:*

The initial visit approached management of Coffee Shack, a well-established backpackers in the area which is FTTSA (Fair Trade Tourism South Africa) certified<sup>1</sup>. Initial interview showed strong interest in the project. For ethical reasons in an area filled with tourist activity, Coffee Shack directed that the project be centered around the local tour guide association, rather than a specific backpackers establishment, and

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<sup>1</sup> FTTSA is a comprehensive 'label' whose certification program is quite intensive and reliable for promoting sustainable businesses.

act rather as a mentor to the guides. The local tour guide association consists of guides from the surrounding community who have been trained over the years as guides. Guides had different levels of training and were able to engage in basic ecological concepts like the problem of invasive vegetation, but did not have the knowledge or the language to explain the ecosystem dynamics in the area to visitors.

There was a strong sense from the entire surrounding community of the want to ‘show-off’ and provide for tourists through various means: singing, dancing, crafts, and seafood sales. Coffee Shack has a strong relationship with supporting the local schools in the area and expressed interest in expanding the project and associated materials to use with school children.

Backpacking tourists readily joined conversations about their contribution to coastal resource depletion and were excited by the opportunity to support sustainable coastal resource learning initiatives. They willingly donated money to school children performances and dinner’s at local headman’s house, but heeded the warnings of Coffee Shack staff and posted notices to discourage children from skipping school, or buying out of season crayfish.

Coastal resource use is prominent in Coffee Bay as the local community has responded to tourist demands for crayfish and mussels. As the rocky shore habitats in the area have been cleared over the years a story of unsustainable harvesting collapsing the natural habitats has emerged. The mussel-rehabilitation project in the area managed by Gugu Calvo-Ugarteburu of the Walter Sisulu University was identified as an important story of sustainability and resource use in Coffee Bay. Over 50 local subsistence harvesters are now responsible for maintaining rehabilitated areas.

The continued keen interest in the project from all involved parties makes Coffee Bay a good site for continued CREC seeding.

[TABLE1]

*Cinsta*

Here work initially started with Buccaneers backpackers and African Heartland Journeys (AHJ). Recently having undergone FTSA process and implementing recommendations, the owners are very active in promoting and supporting local businesses as well as computer literacy courses in local schools. The tourism business interest was to not promote any harvesting of coastal resources. AHJ is currently working on a canoe tour project that will profile local coastal dune forests, two estuarine environments, and the local township. The canoe tours are identified to be run by local township community members. They will be supported for the first three years of development and then become an independently owned company. The canoe tour was identified as a potential space to integrate the CREC development.

A follow-up visit observed and conversed with recreational users. There were no sighted subsistence harvesters. Interaction with the coastal environment from the township community took the form of a walkway to work. A guide from Buccaneer's helped build a picture story and narrative of the estuary. The story that emerged in Cinsta was one of learning to reconnect to one's local environment. Tourists were largely unaware of the impact of their demands for coastal resources and enjoyed engaging in conversations around the local environment.

Cinsta provided an interesting case of local resource users being mainly visiting South African recreational users. By engaging the township community in economic activity around working in their local environment AHJ hopes to foster a renewed sense of connection and agency towards the surrounding environment. Right now the local community is a peripheral observer in the CoP around coastal use. In

order for agency to be cultivated towards coastal resource use, legitimate peripheral participation with core leadership will have to happen to purposefully engage the township toward stewarding sustainable coastal resource use.

[TABLE 2]

*Hamburg:*

Work was done with Keiskamma Trust a well-established community organization with four branches: health, art, heritage, and education; looking to expand into tourism. The initial visit and extended site visits were very promising as the Keiskamma Trust is a group ready to take agency with this project. The Trust has a well-established role and relationship with the community. There is the presence and use of coastal resources in daily life. Many of the women involved in the project have a strong history of coastal subsistence and are very articulate in describing their harvesting practices. The initial site visit and interviews with them opened the idea of ‘ heritage, habitat, and home-cooking’ tours. The agency demonstrated by subsistence harvesters associated with the project created a strong picture of a CoP that held a diversity of community stakeholders as core leadership making it more adaptable and ready to evolve.

Two sustainability harvesting profiles and tours have been completed through work with a project manager. The first explains the practice of imifino (indigenous plants) harvesting for health and nutrition in the coastal dune forests, the second sustainably harvesting the rocky shores. Other ideas emerged such as collecting clay from the estuary and learning how to create a traditional pot.

This site has a lot of potential for being a strong support centre of the CoP model around networked coastal learning. The large issue is the current lack of tourism in the area. There is a heritage site associated with the project, while the goals

of the site align with supporting such a project. However, site location and economic difficulties make it difficult to work in.

[TABLE 3]

## **DISCUSSION**

The exploratory seeding of a network of engaged coastal learning was successful. The overwhelming positive response from Backpacker tourism brokers has opened the door for continued interaction within the CoP framework for education presented here. Conversations with tourists also highlighted their excitement around the concept of being able to ‘experience heritage, habitat, and home-cooking’ in a sustainable way. Within the conversations and observations of sites visited several important themes emerged to help support the cultivation of the CoP this study hoped to foster. Besides the importance of finding agency from core leadership around the tenable nature of the CREC, their immediate reformulation and imagination added to the concept of a local networked environmental education experience provided valuable support for the original idea of cultivating a purposeful CoP (fig. 2). This ‘envisioning of new models’ takes the prevailing awareness and compliance approaches, disrupting its managerial assumptions of authority and control so that local networks are more purposefully engaged in coastal management practices.

The other important theme that emerged from the field studies was the sense of camaraderie between Backpackers and other Tourism brokers with local social responsibility built into their practices. While most of the field work done in this project was on the micro networking level, this helps show promise for CRECs to network with each other on a macro level. Not only does this show the relevance of this study beyond the three pilot sites but also goes to support the idea of tourism brokers recognizing their own agency over the experience of a tourist. Miller (2000) noted that tourism brokers and local populations have a huge power over directing

tourist activities in their environment, but often feel at the mercy of the tourist whims. By finding agency in such a project that promotes sustainable coastal resource use and education and seeking to disseminate that model to other tourism brokers, this project has the opportunity to change the unsustainable culture of tourism that currently is the norm in South Africa.

The importance of Backpackers as part of the core leadership of a community project cannot be understated. This allows for a developing marriage between an understanding and passion for business and a demonstrated commitment toward sustainability that has been lacking from most education and environmental initiatives thus far. By working with local resource users on this tourism project the divide between 'broker' and 'local' begins to blur and community members can be relabelled more aptly 'stewards of the coast' (Miller, *et. al.*, 2002). This integration of currently separately defined parties is what can move this CoP towards purposeful engagement in change practices that awareness campaigns and enforcement have thus far failed to encourage.

For the most part clear agency on the part of local subsistence harvesters was not currently evident. They are seen as either peripheral participants or active members in a CoP primarily working to the agenda of the tourism brokers. The Coffee Shack manager identified themselves as mentors giving rise to the idea that the CoP should be a dynamic framework opening the way to local community agency. In the case of Cinsta where the local community has little to no relationship with the surrounding coastal environment, it is necessary for them to begin to gain agency around their environment or else foreign stakeholders will continue to benefit from its unsustainable harvesting.

***Subsistence Harvester vs. Project Manager:***

It is important to note the special nature of the case study done in Hamburg. Instead of working with a Backpacker, the project leadership potential came from the Keiskamma Trust. An art project, HIV/AIDS clinic, and much more, the Trust was originally founded as a means to gain agency over sustainable environmental harvesting in the area. Seen as a CoP already, the trust expressed interest in expanding its activities to tourism broker as well. It was here that the idea to ‘experience the heritage, habitats, and home-cooking’ concept was born through a conversation with a former poacher and subsistence harvester, now project manager.

The difference in agency over resource use and the project showed most strongly here through the contrasting interactions with the project manager and that of a current subsistence harvester in Hamburg (table 3). Both were able to articulate quite comprehensively how their local coastal ecosystem functions and how to harvest sustainably from that resource, thanks to the work of Davies (2009) in the area. The difference in agency appears to relate to financial security. Without a sense of permanent income the discourse of the subsistence harvester did not yet reflect agency. Meanwhile the project manager who had some experience of interacting with tourists was brimming with ideas and plans for the project to succeed. On a recent follow-up visit to the site the project manager was asked how soon she thought the media and interactive tours could be put into place, she responded, “ As soon as I see the money!” pointing to sustainability being primarily driven by value adding economic benefits.

The comparison offered here also brings to the forefront a thread that was seen at all of the sites, and that was the idea of agency growing with tangible benefits and over time. Similarly at both Cinsta and Coffee Bay it was those guides or locally hired staff that had been interacting with tourists for two years or more who were the most



comfortable with discussing and exercising agency in the new practice. Even the Backpackers who kept referring to this pilot project as ‘yours’ not ‘ours’ needed more time to interact within the emerging CoP suggesting that any learning-to-change process using a CoP approach will not be a process that happens quickly.

***Implications of Tour and Video for Community of Practice:***

Each site had its own story of coastal resource relationships emerge; subsequently it is important for each site to be able to represent itself in its own unique way. To create a blanket approach for the entire South African coast or even just the Eastern Cape does not purposefully and actively engage people in environmental education. Here, media and tours were created around the Handprint manual tradition (O’Donoghue and Fox, 2009), around stories and change activities.

The first completed video profiles the Hamburg project manager and her harvesting of coastal dune forest plants for a traditional meal of Imifino. The story is a series of pictures directed, arranged and narrated by the project manager telling her story of former poaching to healthy sustainable practices. In the six-minute story the foundation for CRECs is set. The video that is currently told in English can easily be produced in isiXhosa and serve as a platform for tour guide training, inciting tourist interest, and even school-based education material. To present a video created in Hamburg to residents of Coffee Bay would not have the same effect as presenting a video on Coffee Bay resource use. To learn by experiencing examples of sustainability within that context will have a much stronger effect, than learning from other’s stories.

The real clincher here is the local tours. By offering tourists the experience of ‘heritage, habitats, and, home-cooking’ unique to an area provides the opportunity for subsistence harvesters to add value to sustainable harvesting of coastal resources.

Instead of the usual R20 (about 3.50 USD) offered for a bag of 25 mussels representing a days work, the tourists can provide quite reasonably R50-60 per head for a tour of the heritage and habitat of a community ending in a home-cooked meal of the mussels they just learned about. If there are just four people on the tour the value of that resource and its associated knowledge is multiplied ten fold, significantly increasing economic gains to the community. This idea created the most excitement from all parties, understandably so, in all of the case studies. By putting an economic value on presenting and experiencing environments sustainably the idea of learning-to-change ‘grows legs’ and begins to run.

## **CONCLUSIONS**

This pilot project has simply opened the door for further engagement around Coastal Resource Education Centers as a Community of Practice. As a short study, it can in no way be stated that the work here is done, even at the pilot sites. Further intensive media creation must be undertaken, especially at Cinsta and Coffee Bay, before the sites can really be off the ground. Luckily, given the simple nature of the picture narratives it is not necessary for much ‘expert’ input on the matter. Once a site has discovered it’s own sustainability narrative within its coastal environmental context the formulation of media and tours around the matter is quite a simple thing. All of the sites that were engaged here have to deal with the issue of resource depletion in one way or another. Rather than shy away from this issue it is hoped that CRECs will help highlight them by promoting other sustainable experiences along the coast, such as imifino harvesting. The tourism broker leadership has already expressed much interest in using such media and tours as a means of school children engagement, thus extending the community of practice to younger generations.

Beyond media creation, a way forward with this project will be to invest time and effort into training guides for the tour aspect of the CREC. It clearly takes time for purposefully engaged ‘learning-to-change’ to be realized and a fair amount of effort is needed to actualize the change. Investments of time and money have to be undertaken by the core leadership or outside coordinators of these Communities of Practice to ensure a continued purposeful engagement with local communities and their resources. The reward to the community for trying to approach education in a networked learning engagement, and community here includes all aspects of a community: the subsistence harvesters, school children, tourism brokers, conservationists, managers, the environment etc., will help to free local coastal resource use from the paradoxical bind of unsustainable use it is now in. Finally, a central danger remains that the coastal poor remain disenfranchised and caught between the technical inscriptions of enforcement and awareness creation campaigns of the bureaucracy and the co-opting agendas of tourism brokers. To avoid this fate, they clearly need support to drive their own purposeful agenda of value adding change that serves to reduce their impact on the declining coastal ecosystems upon which they depend.

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### **Interviews**

Code: Interview Participant:

#### *Information Building:*

IB1 Dr Angus Paterson, SAEON manager, 12-10-09

IB2 Bernadette Snow, Nelson Mandela Metropolitan University 29-9-2009

IB3 Tony Ribbink, Sustainable Seas Trust, 27-9-2009

IB4 Local Enforcement Officer (un-named) 2-10-09

IB5 Lawrence Sisitka, umSenge: Conservation, Environment and Development on 2-10-09

IB6 Lugile Nodwala, MCM management in East London 24-10-2009

IB7 Qurban Rouhani manager Rural Fisheries Programme, Rhodes University 6-10-

2009

- IB8 Prof. Rob O'Donoghue, Rhodes University Environmental Education and Sustainability Unit on 28-9-2009
- IB9 Penny Haworth, Communications Manager SAIAB on 2-10-2009
- IB10 Prof. Robin Palmer, Rhodes University Department of Anthropology on 16-10-2009

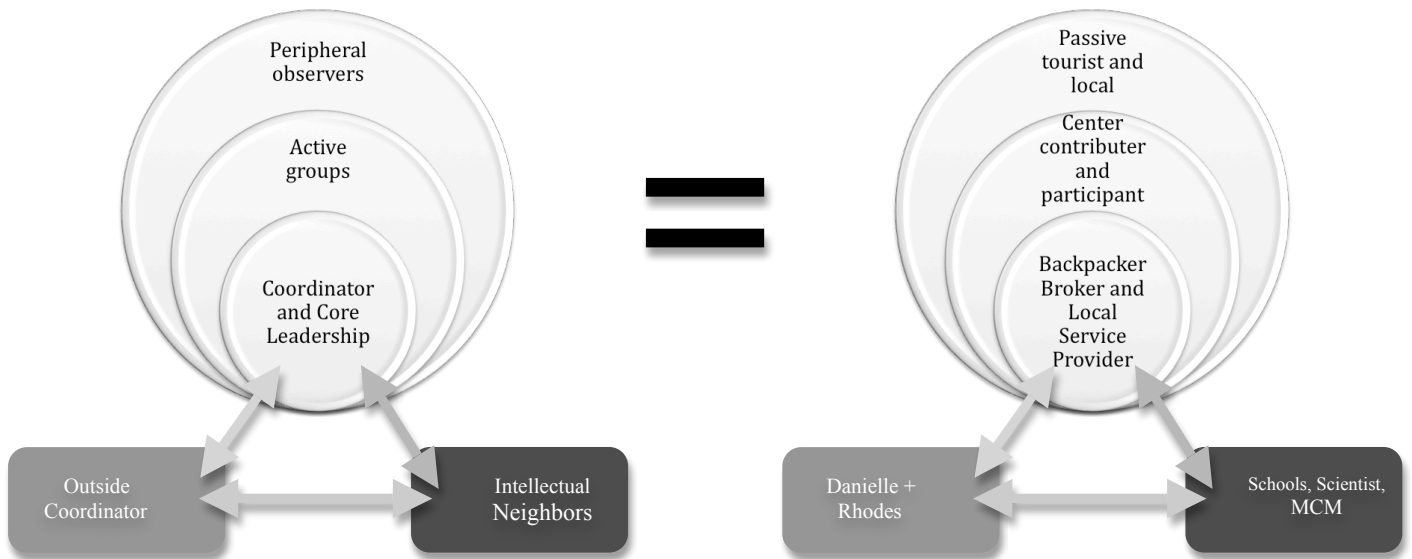
*Pilot Studies:*

- PS1 Belinda Malherbe, Coffee Shack Manager 14-10-2009
- PS2 Coffee Bay Guide 14-11-2009
- PS3 Jeff Brown, Coffee Bay Mussel Rehabilitation Manager 13-10-2009
- PS4 Hamburg Mussel Harvester 29-10-2009
- PS5 Nozeti, Keiskamma Trust Project Manager on 28-10-2009
- PS6 Nozeti, Keiskamma Trust Project Manager on 29-10-2009
- PS7 Mike Denison, African Heartland Journeys 6-11-2009
- PS8 Sean Price, Buccaneers Backpackers and African Heartland Journeys on 15-10-2009

## Figures and Tables

**FIGURE 1:**

Visualization of Wenger's (2002) CoP



[FIGURE 2]

**7 Principles of Cultivating Community of Practice:**

1. Design for evolution.
2. Open a dialogue between inside and outside perspectives.
3. Invite different levels of participation.
4. Develop both public and private community spaces.
5. Focus on value.
6. Combine familiarity and excitement.
7. Create a rhythm for the community.

(Figure 2 ;Wenger, 2002)



Issues	<p><i>Coffee Shack Management:</i> Permitting is a problem in the area, the system disenfranchises local coastal subsistence gatherers. Coffee Shack has been looking into getting a permit for years to buy, but the system is confusing. <i>If people are hungry, you cannot tell them not to find a way to eat.</i></p> <p><i>Coffee Bay conversations and observation:</i> Area is full of tourist activity, some establishments bend law to cater to tourist wants.</p> <p><i>Guides:</i> Training is in quite a short course, they can identify ecology but don't speak on the level of ecosystems. There is a cultural shyness to new guides, who need about 2 years to gain confidence.</p>
Agency: Doable	<p><i>Coffee Shack Management:</i> Positive affirmation of project interest, and confidence of local people who would work well with such a project</p> <ul style="list-style-type: none"> <li>Key phrases: <i>Yes, I don't think it would be any problem, I would rather buy local, This could actually be quite good, I like the concept, I like the idea. It's something else that we can offer our people, that people can be doing. You know, income for them, perks of our guests.</i></li> </ul> <p><i>Restoration:</i> Restoration project clearly return mussels to rocks and ecosystems (i.e. reduction in algae)</p> <p><i>Guides:</i> Took to the idea of paying local people more money to cook it for the tourists, liked the idea of being able to bridge the lang. gap for tourists</p> <ul style="list-style-type: none"> <li>Key phrase: <i>Very interesting, yes very interesting, I think I could do that, the language is a problem but if I am here to translate it could be good.</i></li> </ul>
Agency: Commitment	<p><i>Coffee Shack Management:</i> Agrees to help project along, and offers help in coordinating research.</p> <ul style="list-style-type: none"> <li>Key Phrases: <i>Is there anything else I can offer you?</i></li> </ul>
Agency: Envision new model	<p><i>Coffee Shack Management:</i> Vision for project to extend into local schools. Suggestions for different sustainability profiles. Ideas for best means for project to succeed in Coffee Bay.</p> <ul style="list-style-type: none"> <li>Key phrases: <i>The schools would be very keen to get on board for sure., I mean even things like collecting imfino, that sort of stuff.</i></li> </ul> <p><i>Guides:</i> Suggestions for how to work with the guide association.</p> <ul style="list-style-type: none"> <li>Key Phrase: <i>We could all use training, maybe how to best explain it</i></li> </ul>
Camaraerie	<p><i>Coffee Shack Management:</i> Suggested other relevant backpackers to visit with a history of sustainability initiatives.</p> <ul style="list-style-type: none"> <li>Key phrases: <i>There's another backpackers down the coast, which would also be very good for this project of yours, very good, they are also Fair Trade accredited.</i></li> </ul>
Lack of Agency	<p><i>Coffee Shack Management:</i> Vague understanding and disenchantment with coastal enforcement and projects</p> <ul style="list-style-type: none"> <li>Key phrases: <i>I don't know if that is still happening or not., I mean they came here looking for crayfish, so I think they are focused on marine</i></li> </ul> <p><i>Guides:</i> Some admitted poaching in the family: harvesting too much or without license when family is hungry</p>

Table 2: Cinsta Agentive Speech and Actions around Proposed Project	
Issues	<p><i>Buccaneer's /AHJ Management:</i> Do not want to harvest from recovering ecosystems in area. Mussel beds were depleted from tourist demand, not subsistence user. Xhosa community is relocated from 10km away from the coast and has little to no relationship with coastal resources. Cultural confidence guide gap</p> <p><i>Cinsta Recreational User observations:</i> 'Weekend warrior' recreational fishers represent almost entirely coastal resource use pressure</p>
Agency: Doable	<p><i>Buccaneer's /AHJ Management:</i> Positive affirmation of project interest, confidence of local people who would work well with such a project, already working on formulating environmental tour concept</p> <ul style="list-style-type: none"> <li>Key Phrases: <i>We would be very excited about it. I think that to provide a space would be no problem I am actually quite excited about that. I like that idea of having a space that people can interact with interesting issues rather than just the mundane stuff that is in most backpackers., Yeah, that would be great to have., We could look at using your program...</i></li> </ul>
Agency: Commitment	<p><i>Buccaneer's /AHJ Management:</i> Agrees to help project along, offers help in coordinating research, committed to making own canoe tour work for the next 3 years.</p> <ul style="list-style-type: none"> <li>Key Phrases: <i>Alright, so what do you need from me?, I could bring it to them with a whole presentation., After 3 years should be a private locally-owned company.</i></li> </ul>
Agency: Envision new model	<p><i>Buccaneer's /AHJ Management:</i> Suggestions for project to extend to coastal monitoring, other social-political and environmental issues and integrating with school computer literacy program (run by AHJ), as well as other centers along the coast.</p> <ul style="list-style-type: none"> <li>Key Phrases: <i>There is an opportunity, that we can open up around oysters on our beach., This is an area where maybe we could look at some photo monitoring. , What you are wanting to do, and link that into the schools program would be quite an exciting thing for us.</i></li> </ul>
Camaderie	<p><i>Buccaneer's /AHJ Management:</i> Suggested other places that such a project would work, and expressed intention to support initiative elsewhere.</p> <ul style="list-style-type: none"> <li>Key phrases: <i>I would put Umgazi down, they would engage with this like*snapping*that., I should really go and speak to Carol and help her set that backpackers up, because I know how to make it work.</i></li> </ul>
Lack of Agency	<p><i>Buccaneer's /AHJ Management:</i> Unconvinced of sustainable resource harvesting. A "your" project mentality.</p> <ul style="list-style-type: none"> <li>Key phrases: <i>You are looking for the short wins. You are looking..., In terms of what you guys are offering..., I am not sure that I want that.</i></li> </ul>

Table 3: Hamburg Comparative Agentive Speech and Actions around Proposed Project		
	Project Manager (former sub. User)	Subsistence Harvester
Agency: Doable	<p>Specific plans of tours, where they will go, what people will do, and who can lead them. The birth of the idea for “heritage, habitat, home-cooking”.</p> <p>Key phrases: <i>There is a a lot of things that I am thinking of... to introduce the traditional meals that they don't know... To introduce to them to the beach., I cook food outside on the fire, we sit around the fire and enjoy the meal.</i></p>	<p>Understands ecology of mussels and how to explain it (needs translator). Wants to cook for tourist, and tell the tourist about resource.</p> <p>Key Phrases: <i>I do teach them..., I would tell the tourist that the seafood is very healthy..., I've got several kinds of making them for tourists...</i></p>
Agency: Commitment	<p>Immediate response and follow through to media creation. Use of “we”, not “you” in media project creation.</p> <p>Key phrases: <i>Let's go for imifino because we missed the tides, but it would be nice to have them from the sea, then we cook them in the pot, so you take some photos, and you show how we eat them., We always keep on trying...</i></p>	None
Agency: Envision new model	<p>Ideas of how the project can work outside presented model.</p> <p>Key Phrase: <i>Then if we can not find them, we can just speak about the beauty of the beach, just sitting there reading your book or whatever.</i></p>	None
Lack of Agency	<p>Reference to past lack of agency. Credits many ideas to Trust founder. People pleasing.</p> <p>Key phrases: <i>Would you like a group of people?, It was Carol's idea to identify our history., But the government says we need to have a co-op...</i></p>	<p>Needs to feed 12 mouths on own and sees no other choice than subsistence harvesting. Sees researchers as the agents of change.</p> <p>Key phrases: <i>I have no choice, I have to go under the water and under the rocks to catch the food., It's not enough because there is only 5-6 cockles . 12 mussels. That's not enough., ...As we have been told, by the researchers..., As you are doing your research will you bring some tourists to come ...?, I'm not allowed...</i></p>
Issues	<p><i>Manager</i> Racial tensions in the area around resource use as well as past issues with local MCM. Access to computers and internet is lacking.</p> <p><i>Harvester</i> Key Phrases: <i>I do go to the sea, because also that is where I've got the income, because apart from taking the seafood to eat, sometimes when there are like holiday makers I used to sell the mussels and cockles to the tourists and get some money to buy food...I am the bread winner to look after the kids.</i></p>	