

Research Proposal

Unravelling the Vicious Circle: Poverty Alleviation and Sustainable Livelihoods in Small-scale Fisheries (POVFISH).

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Aim

Alleviating poverty sometimes requires strategies that are inherently in conflict. This is particularly the case in economies based on natural resources. For instance, in fisheries and coastal communities, poverty is commonly related to overuse and hence the degradation of natural resources. Poor fishers may have no other alternative than to continue their environmental destruction, and they will also suffer the consequences. If you do not fish, you starve. If you fish you ruin the resource and then starve. Thus, poverty may be both a cause and an effect of unsustainable fisheries. For fisheries and coastal management, this constitutes a dilemma: As you aim to develop a fishery, you may undermine its basis. As you seek to reduce poverty, you risk aggravating it. Therefore, fisheries development must go hand in hand with fisheries management (Bailey and Jentoft 1990; Hersoug et al., 2004). Poverty alleviation must occur within safe ecological limits; if not, poverty will be sustained, if not amplified. This project (POVFISH2) aims to map out the effects that environmental insecurity and degradation have on poverty and food security, and vice versa. The question is what governance mechanisms, tools and actions (Kooiman et al. 2005) are needed to bring small-scale fisheries and coastal communities out of the vicious circle of poverty.

We question how poverty can be alleviated while also maintaining a healthy ecosystem. We will study how fishers in poor communities cope individually and collectively with maintaining sustainable livelihoods through periods of resource crisis. We ask what conditions are essential to securing resilience at individual, household and community levels. A particular focus will be on the institutions that exist at various levels enabling collective action. Especially we will investigate their capacity for poverty alleviation, resource stewardship, and empowerment of the poor. Although our main locus will be in the south where poverty in small-scale fisheries is most widespread, the management challenge is general and there are lessons from crisis-ridden communities in the north that are also relevant.

Theme

There is a conspicuous absence of references to fisheries and coastal communities in academic research on poverty alleviation (Béné, 2003). This is a paradox given the fact that small-scale fisheries play a key role in providing food security, alleviating poverty and reducing vulnerability. Small-scale – or “artisanal” - fisheries involve more than 50 million fishers around the world (Berkes et.al. 2001) and approximately 150 million people live in households that depend primarily on small-scale fisheries. Small-scale fisheries provide about half of the world’s fish production used for direct human consumption. In many parts of the world, this type of fishing activity also generates essential cash income for the rural poor, including those who only fish occasionally and are not officially recognized as fishers (FAO/WorldFish Centre 2005). In addition to primary support, small-scale fishing also represents an important “safety-valve” when livelihoods in “non-fishing” (e.g. agricultural) communities are under threat (Jul-Larsen et. al. 2003). Small-scale fisheries can help to maintain a degree of economic, and hence political, stability, particularly for states with a

heavy reliance on fisheries resources and where economic options for the populace are few. Béné (2003) argues that fishing communities represent an “inexhaustible mine” of examples concerning collective action, decision-making processes, power relationships, social (re)distribution or (re)appropriation mechanisms, and local political competition (for access and control over the resources and rents generated by these resources) and these constitute some of the central themes of the new agenda on poverty alleviation and research.

Knowledge gaps

As stressed by the above mentioned FAO/WorldFish Centre Report (2005), we need in-depth case studies of how small-scale fisheries are working and why they are becoming increasingly marginalised. Resource management may well be one of the drivers in this process, but the problem is also likely to be much more complex (Kurien, 2002). In any case, more knowledge is needed on how effective current resource management systems are at alleviating poverty. Are they part of the problem rather than part of the solution? Lack of sufficient *human and financial resources* for planning, enforcing and monitoring fishing behaviour may also be part of the explanation. The problem may also be *deficient institutions*, legal or organisational. For instance, in the 1930's poverty in Norwegian fisheries was effectively addressed by introducing institutions, most importantly the Raw Fish Act, that shifted the bargaining power from merchants to fishers' sales organisations. Insufficient or *inadequate research* may be another factor. Most of the fish stock assessment tools available today have been developed for temperate and not tropical areas (FAO 2005). In small-scale fisheries of the south, these tools are inadequate and unrealistic, partly for economic reasons (Castilla and Defeo, 2001; Hilborn et al, 2004; Johannes, 2002). Fisheries and coastal management must also focus on economic, social and cultural issues, for instance how small-scale fisheries are embedded in local communities (Hughes et al, 2005; Jentoft, 2000; 2004). Thus, fisheries and coastal management must draw on other academic disciplines that just biology.

Analytical perspective

Fisheries and coastal management are now moving away from single-species stock assessment and sector approaches towards “ecosystem-based” modelling and holistic approaches, as these recognize the complexities and interactions characteristic of such systems (Pikitch et al. 2005). The new approaches also emphasize the need to include humans in the equation. Humans are, after all, potentially very destructive users of marine and coastal resources, and the institutions developed for protecting such resources from depletion are human constructs aimed at regulating human behaviour. However, the new ecosystem approach to fisheries and coastal management may not be sufficiently holistic if humans are perceived as just genetically more sophisticated species. The users of marine and coastal resources come with social and cultural baggage. Their resource use and management are embedded in social networks and institutions. As people pursue utility, they also seek meaning, security and justice. When small-scale fishers adapt to change, cope with ecological crisis, and strive to survive in the face of poverty, they do not and cannot respond as individuals only. Rather, they take action as households, groups, communities, and nations. Consequently, the institutions that are built in order to combat poverty, such as those that allow small-scale fishers to become more actively involved in fisheries development and resource management, must have this as their premise. In addition to natural and financial capital, small-scale fishers and their dependants also need social capital, such as trustful relationships, well-functioning communities, and organisations that represent them (Jentoft 1999). How to build and activate these forms of capital among small-scale fishers coping with poverty and ecological crisis, should be among the primary focuses of fisheries and coastal

research. Therefore, as much as we need an ecosystem approach, we also need a social system approach to fisheries and coastal management, recognizing that social systems are as diverse, complex and dynamic as natural systems. We need to take into account that with globalization, socio-economic systems are becoming increasingly complex, diverse and dynamic, and thus impose greater risks on small-scale fishing and coastal people. And we need to move away from the belief that state intervention and centralized command and control are always the answer to the problems that small-scale fisheries are facing.

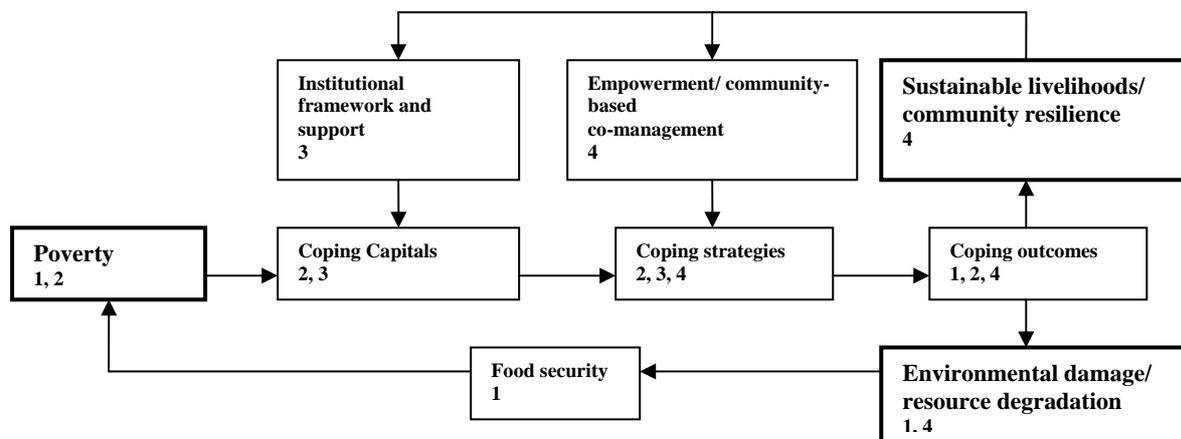
Theoretical reference

The POVFISH2 project shall draw on and contribute to “sustainable livelihoods theory” (Allison and Ellis, 2001) and fisheries governance theory (Kooiman et al. 2005). Sustainable livelihood is defined as a livelihood which can cope with and recover from stress and shocks and, both now and in the future, maintain and enhance its capabilities and assets while at the same time not undermining the natural resource base (Carney et al., 1999). A livelihood’s sustainability is determined by the ability of people to withstand stress or shocks and is also referred to as *resilience* or sensitivity (Davies, 1996). The economic, social and environmental dimensions, as depicted within sustainable livelihoods-theory, determine people’s ability to implement effective coping strategies. Scoones (1998) distinguishes between three different coping strategies: intensification, migration and livelihood diversification). We believe that there are also other coping alternatives that must be investigated (Jentoft and Andreassen 2005). In order to cope with poverty, people must possess, or have access to, “capitals,” be they human, social, institutional, cultural, physical, financial and natural (Carney et al., 1999). Bærenholdt and Aarsæther (2001) perceive social capital as primary because it works as a way of accessing other forms of capital. Béné claims that the social and institutional framework that exists within and around fisheries play a very important role in the maintenance, alleviation, or aggravation of poverty in fisheries-dependent communities (Béné, 2003). Which institutional mechanisms are needed to enable communities to play a proactive role in resource management and poverty alleviation, i.e. breaking the “vicious circle of poverty,” shall be an important focus in our research. We assume that the higher the score on social capital, the more self-reliant and resilient are communities in addressing issues over resource over-use and poverty. This is because of the essential role that social capital plays in building effective institutions (Jentoft, 2004)

Explanatory model

In line with existing social science literature, we perceive poverty as multifaceted and expressed in terms of lack of food security, safety and other essentials like income, education, health services, political influence, human rights etc. Alleviating poverty, confronting marginalisation and enabling deprived people to cope with environmental and social stress and risk require the implementation of various human, social, natural and man-made capitals, as listed above. With a deficit of such assets, their coping responses to crises will likely be less effective and more environmentally risky, as they are left with no alternative other than to individually continue to fish, and thus collectively to over-exploit. Institutions at various levels, backed up by legal, organisational and, financial support from government and/or civil society, may potentially help individuals and communities in building capital, and hence make them more resilient. Individuals and communities can also do a number of things to empower themselves, such as build networks and alliances within their communities and with the external world. Thus, they would potentially strengthen their capacity for the collective action, self-help and political participation that are needed to sustain their social systems and ecosystems. The relationship between independent and dependent variables and feedback that makes the vicious circle of poverty cumulative is depicted below. The model depicted below

summarizes this process. Notably, the model should be perceived as an “ideal type,” i.e. as a yard stick for empirical comparison and evaluation. The different POVFISH2 theme products are indicated by numbers, and will be elaborated below (see Deliverables section).



Research questions

The POVFISH2 project will have two focuses: First it will describe how poor people individually and collectively cope with poverty and resource crisis. Secondly, it will address what would be the proper governance response, given the dilemmas that surround poverty alleviation and resource degradation and the hard choices that managers and resource users are faced with as a consequence (Kooiman et al. 2005). The potentials for capacity building, empowerment and co-management at community and regional levels will be given special attention. In particular, we will address the following questions: 1) Under what conditions are small-scale fisheries environmentally sustainable or destructive? 2) How does the vicious, cumulative process of poverty unfold? 3) What are the detectable ecological and socio-economic impacts of over-extraction? 4) What is the role of civil society institutions, like local communities and non-governmental organisations (NGOs) in marine and coastal management and poverty alleviation? 5) How do governmental initiatives and policies enable or restrict coping strategies at the individual/household and community levels? 6) How does poverty in small-scale fisheries relate to market forces, price fluctuations, and bargaining power in exchange relation? 7) How are social and cultural differences, such as ethnicity, class, caste and religion, expressed in the ways people relate to natural environments and cope with economic deprivation? 8) Knowing that in fisheries and coastal communities women play an important role in providing for the basic needs of their family and community (Neis, et al 2005; Bennett, 2005), how do gender-relations at the household and community levels influence poverty coping strategies and resilience?

Research design:

The factors leading to poverty and poor peoples' coping strategies will vary from country to country depending on the particular ecologic and socio-economic context. One may even assume that the very meaning of poverty will vary from setting to setting. A person who would be characterized as being poor in one country may well be considered well-off in another country. This suggests that poverty must be analysed within the framework of social stratification specific to a country or region. Poverty is also composite concept; it has many dimensions, as indicated above (Lister, 2004; Townsend 1971). For both reasons it is essential with a fairly large sample of fisheries systems and settings that would allow for comparative analysis and theory induction (Glaser and Straus 1969). Then, the specifics of poverty cannot be defined *ex ante*, but must emerge from empirical research.

Case studies will include European, African, Asian and Latin-American countries. *First*, two case studies – Nicaragua and Tanzania – are already financed as PhD projects by the Norwegian Research Council (FRISAM). These case studies shall nevertheless be integrated in this broader study. *Secondly*, more than ten Master thesis projects by students at the Norwegian College of Fisheries Science, University of Tromsø will be carried out within the POVFISH2 framework. *Thirdly*, nine smaller projects will be outsourced to research institutions in the countries of study with which MAREMA has ongoing collaborative ties. The case-descriptions presented below are developed in cooperation with our international partners. We will also be coordinating our work with research on poverty in fisheries being done by collaborating institutions in Europe and Norway, notably the MARE Centre at University of Amsterdam, Institute of Fisheries Management and Coastal Communities (IFM) at Hirtshals, and Christian Michelsen Institute, Bergen.

b) Master theses

Every year NFH recruits to its International Fisheries Management Master program about twenty students from around the world, mostly from countries in the South. (<http://www.nfh.uit.no/hmenyvis.aspx?id=885>). Students will be encouraged to do their thesis research within the project theme and within their home-country. The POVFISH project will provide travel grants on a competitive basis and provide supervisory services as is routine. Thus, the number of countries represented in this study will be considerably enlarged. How many and which countries cannot be determined at this point.

c) Case-studies (partly or fully outsourced)

Sri Lanka: This case study will concentrate on the Hambantota district of Sri-Lanka's south. According to official estimates, 25-39% of the Sri Lankan population is classified as poor. Environmental degradation due to non-sustainable resource use creates unaccounted costs estimated to 2.5% of GDP. Conflicts are also affecting poverty, as they have displaced large number of families (Government of Sri Lanka 2002). Almost all fisheries development projects in Sri Lanka have aimed at maximizing resource utilization. Traditional fishing methods were exchanged for more efficient modern gear. As of 2001, the level of exploitation (183,000 tons) exceeded the suggested maximum sustainable yield (162,000 tons). The modernization of the capture fisheries has, in turn, caused conflicts between various gear groups (trawlers and small-scale fishers, drag-net and trap-net and drift-net fishers, purse-seines and small-scale fishers, and shrimp farms and traditional fisheries) (Wijayaratne and E. Gudmundsson 2001; Wijayaratne and Maldeniya 2003). The impact of the tsunami on fishing people and communities will be an important emphasis of this project. The damages went beyond the deaths of many people, including 5,000 fishers; it also disrupted social networks and livelihoods and destroyed assets and infrastructure, such as housing, water, and electrical supply and roads. 150,000 people lost their livelihood, of which 50% was in fisheries. 75% of the fishing fleet was destroyed or damaged (Government of Sri Lanka 2005). Signe Sønvisen a PhD student at MAREMA shall be involved in cooperation with Prof. Oscar Amarasinghe, Univ. of Ruhuna. (See attached letter)

Tanzania: The Tanzania case study will focus on Lake Victoria fisheries. The lake, which is shared among three countries - Tanzania, Uganda and Kenya - offers vast economic opportunities for the people living around it and beyond. Lake Victoria has experienced a rapid expansion of the fish processing industry and an increase in the amount of processed fish that is exported (Lukunga, 2005). Still, arguments have been made that expansion had led to more poverty within riparian communities, less nutritious food for local people (Sauper,

2005), a breakdown of traditional family structures (Onyango 2004; Jambiya 2004). These observations need to be verified by more empirical research, and the need to assess the economic condition of the fishers around Lake Victoria is therefore apparent. This assessment should serve to highlight the impact of the booming fish processing and export business in the lake zone, particularly in terms of household living standards. It will also serve as an important interjection to the management plan for the fishery that is currently being implemented through a project funded by the European Development Fund (EDF 8) and will give insight into the relative social and economic position of stakeholders in the fishery. Furthermore, the study will be a contribution toward exposing the important link between poverty and resource use, and it also highlights the extent to which fishery management can fit into the poverty alleviation effort. Paul Onyango, a PhD student at MAREMA, NFH on the lake's fisheries and is currently working there. The study will be hosted by the Faculty of Aquatic Sciences and Technology (FAST) at the University of Dar-es-Salaam (UDSM) Supervisors: Prof. Svein Jentoft MAREMA/NHF and Dr. Erik Jansen of Ministry Foreign Affairs who has a wide knowledge of the lake. (See attached letter).

Vietnam: Fish harvesting and processing is a major industry in Vietnam with respect to employment, earnings and export. Total landings in 2004 were 2 million tons, of which 7 % is from inland fisheries and the production from aquaculture was 1.2 million tons. There are 86 thousand motorized fishing vessels with a total engine capacity of 4.8 million HP and about 1 million fishers. Traditionally, fishers have been among the poorest part of the population. However, there are also some fishers, in particular vessel owners, who, over the last decade or so, have become relatively wealthy, compared to the national average (Le et al., 2006; Nguyen et al., 2006). It is a challenge to investigate, in-depth, why some fishers are poor, while others seem to cope just as good as or even better than the regional average. A socio-economic survey of fishing households in the Nha Trang area will be conducted, and will investigate, among other things, the households' access to financial, man-made and social capital, as well as the development of their own human capital. Access to natural resources and how this has evolved over time will also be investigated. National cooperative institution: University of Fisheries, Nha Trang. National coordinator: Dr. Kim Anh Thi Nguyen, Dean, Faculty of Economics. Supervisor: Prof. Ola Flåten, MAREMA/NFH. (See attached letter)

Thailand: The fisheries of Thailand represent a classic case of resource over-exploitation due to unsustainable development. For example, the massive increase in trawling effort, since its introduction in the early 1960s, led eventually to a reduction in high value fisheries catches and an increase in the catch of the ill-named trash fish (Pauly and Chuenpagdee 2003). The use of trash fish as raw materials for production of feed (fish meal) for aquaculture and poultry farming adds another challenge to fisheries management. Trash fish are often food fish to the local poor, while shrimp is an export commodity. The hardship of Thai fishers, particularly those on the Andaman Sea, was exacerbated by the Indian Ocean tsunami that destroyed fishing boats and gear, among other things. How the tsunami impacted fisheries resources and ecosystem, as well as the actual loss of livelihoods and the food security of fishers has yet to be identified. A fishing community on the Andaman Sea will be selected as a case study. The study mainly aims to assess the impacts on poverty of both human-induced activities, such as the introduction of modern fishing technology and the expansion of shrimp farming, and natural phenomena such as the tsunami. Further, it seeks to evaluate the importance of social capital and the resilience of fishing households and their coping strategies in dealing with human-induced and natural disasters. The study will be contracted out to the Coastal Development Centre at the Faculty of Fisheries, Kasetsart University, in

Bangkok. One of the principal investigators (Jentoft) serves on the centre's advisory board and will be involved. (See attached letter)

Mozambique: Some 80.000 Mozambicans are mainly occupied with fisheries related activities. During the period of colonial war and, later, civil war, large population migrations took place. Fish resources played an important role as an economic buffer where food could be produced while interior agriculture areas were unsafe and partly destroyed. Small-scale (artisanal) fisheries are found in communities all along the coastline and in inland waters. These fisheries are highly differentiated in a number of aspects, including regional, ownership, organization, technology, income, and gender, and this implies differentiated needs, development options and strategies. So far development initiatives have targeted the market-oriented part of artisanal fisheries whereas poorer collectors and fishers, who work on foot, a group that includes large numbers of women, have been neglected. This case study will focus on the latter group and how it is affected by changes in fisheries management policies and extension activities aiming to develop the fisheries in a market-oriented way. The MAREMA supervisor will be Assoc. Prof. Arne Eide. The local counterpart is Yangula- Estudos Projectos, Ltd and Mr Joaquim Tenreiro de Almeida. The project will also draw on the expertise of the governmental institutions IIP (Marine Research Institute) and IDPPE (Institute of Small-scale Fisheries Development.) (See attached letter).

South Africa: During apartheid, most blacks lost rights to fisheries resources through systematic exclusion from the mainstream economy. Black people also experienced forced removals from the coast. With the new post-apartheid regime, the goal (cf. the 1998 Marine Living Resources Act No. 18) is to allow subsistence fishers to meet their basic necessities, and contribute towards their food security and general livelihoods, through the harvesting of local marine resources. However, most of the resources that are being allocated for subsistence are limited and thus cannot sustainably support the number of fishers dependent on the resources. In addition, most of these resources are already overexploited, meaning that most applicants will not get rights. Even those that get rights will have to supplement fishing with alternative livelihoods. This raises a number of difficult issues pertaining to access distribution and social justice that beg for social inquiry. The case study will be carried out in three communities in three provinces (Western Eastern and Northern Cape). Investigator will be Dr. Mafaniso Hara and Dr. Moenieba Isaacs, School of Government, University of Southern Cape, Cape Town. (See attached letter)

Guatemala: The small Atlantic Coast of Guatemala is a relative densely populated area. Although the coast is surrounded by natural protected areas, one of the main economic activities is natural resources use. Fishing practices in this area are predominantly small-scale and structured along ethnic lines. In recent years the number of fishers has increased due to a lack of other working alternatives and a de facto open access fishery (Heyman and Graham 2004). Gear conflicts, particularly between small-scale and capital intensive (trawler) fishing, are common. Fishers complain about a general decrease in landings and attribute causes to the use of inadequate fishing techniques and contamination. This case study will be carried out by our own PhD student Hector Andrade, who is a native Guatemalan and partially funded by the World Wildlife Fund. The research will take place around the town of Livingston, particularly in the Bahía de Amatique. Andrade will work with local NGOs, like CONAP (The National Council of Natural Protective Areas). Supervisors Assoc. Prof. Jorge Santos and Prof. Svein Jentoft, MAREMA/NFH.

Mexico: The coastal communities of Yucatan are suffering the consequences of overfishing, immigration and natural disasters such as hurricanes. The increasing number of fishers, as well as more efficient technology, has resulted in the resource overexploitation. Mass-immigrations to the Yucatan coast have led many of the newcomers to take up fishing. The immigration has also disrupted the culture and socio-economic structure of existing coastal communities, causing problems of securing viable livelihoods for local people who have few employment alternatives to fishing and who have responded to increased competition by increasing their own fishing effort. In many instances, this has led to conflicts between locals and newcomers, sometimes resulting in violence. Marine Protected Areas have been established, but with mixed results. The study will build on previous research done in fishing communities of San Felipe and Dzilam de Bravo (Bjørkan 2006; Chuenpagdee, et al. 2004). The study will be carried out by our own PhD student Maiken Bjørkan in collaboration with local CINVESTAV research institute (Centro de Investigacion y Estudios Avanzados Unidad Merida.). Supervisor: Dr. Silvia Salas, CINVESTAV. (See attached letter)

Turkey: In the Turkish coastal Black Sea region, fishing constitutes one of the few economic opportunities open to poor rural and small town people. While both purse seining and trawling remains important in the capital intensive sector, small scale fishing has exhibited the largest growth during the last ten years. Many men (and some women) from among the poorer sections of the society, and with diverse ethnic backgrounds, have entered into this sector, and, especially where harbours have been constructed during the 1990s, whole new fishing communities (e.g. Dereköy, Terme) have emerged. Poverty, together with low educational levels and poorly developed social security systems have clearly driven people into the fisheries sector and caused increased fishing pressure and environmental degradation. A few communities, through local fishing cooperatives, have successfully lobbied for the establishment of no-trawl zones. The case study will be conducted in the provinces of Samsun and Trabzon. In addition, fieldwork will be carried out in Terme – one of the communities in Samsun where a frontier fishing community of poor men and women has developed during the last twenty years. The investigation will be carried out by Assoc. Prof. Ståle Knudsen, Institute of Social Anthropology, Univ. of Bergen, in cooperation with a local Turkish researcher Hakan Kocak, PhD student at Department of Work Economy, Marmara University, Istanbul. Knudsen has long time research experience from this Turkish region. (See attached letter).

Poland: Recent Polish history is characterized by very rapid and dramatic political, economic and social change. At the local level these developments have, in many instances, brought social instability and unemployment. As a new member of the European Union, rules and limitation were introduced that made the situation more difficult in many of small-scale fishing communities. This study will be carried out in Tolkmicko, which is small town and fishing harbor situated on the southern shore of the Vistula Lagoon. Sixty six of the town's 635 employees are fishers. Twelve of them declare their readiness to destroy their boats for money offered by the special European Union fund. The fishers in Tolkmicko are also suffering the consequences of overfishing, environmental degradation. As a consequence of the systematic lowering of catches, very limited tourism in the region, and a lack of alternative sources of income for local people, Tolkmicko has one of the highest unemployment rates in Poland – 33,6% (2004). Polish average is 19,1%. The study will be conducted by Dr. Boguslaw Marciniak at the Sea Fisheries Institute in Gdynia. (See attached letter).

Work plan

The POVFISH2 project will draw on both natural science and social science perspectives and insights. Our research centre, MAREMA, whose faculty members represent all relevant sciences, is well equipped for handling such a challenge. The project will also benefit from the considerable network of people (130 as of June 2006), most of them from the countries in the south, who have graduated from our International Fisheries Management Master program. Most of them have now returned to their home countries and to fisheries related jobs.

In the first phase, before going into the field, theoretical and methodological preparation is needed. The literature on poverty alleviation and sustainable livelihoods theory (Allison and Ellis 2001); integrated coastal zone management (Cicin-Sain and Knecht 1998), rural development theory, and social capital assessment techniques, especially those developed by the World Bank (<http://www1.worldbank.org/prem/poverty/scapital/>.) will be reviewed, operationalized, and communicated to project participants by the principle investigators (Jentoft and Eide). To acquire primary data surveys, participatory observation, in-depth interviews, focus groups and workshops will be employed. For some of the research methods, we will consult with international specialists in the field. A Research Handbook defining key concepts, theories, specific research questions and methods shall be developed. An academic writing course will be offered.

Deliverables: Publications

- a) POVFISH2 will produce an edited volume (and/or a special issue of a peer reviewed journal), containing chapters based on all sub-projects. The editors (Jentoft and Eide) will write the introduction and conclusion. The book proposal will be submitted to renowned publishers such as Oxford University Press, Island Press and Amsterdam University Press. The working title is as of this project: “Unraveling the Vicious Circle of Poverty...”
- b) In addition to three journal articles each in internationally refereed journals such as World Development, Ocean & Coastal Management, Marine Policy and Maritime Studies, the PhD students will also contribute one chapter to the edited volume.
- c) The outsourced case studies shall contribute to the edited volume with at least one chapter each.
- d) A minimum of ten master theses published electronically by NFH. Students will also be encouraged to write an article to be included in the book.
- e) POVFISH2 will be represented with special sessions at the 2009 “People and the Sea” MARE conference organized by the University of Amsterdam.
- f) A Policy Brief summarizing project findings and outlining policy implications will be produced.
- g) Stakeholder meetings: Project result will be presented to a group of stakeholders in 2010: Relevant participants are NORAD, FAO, and ICSF (International Collective in Support of Fisheries).
- g) A POVFISH homepage and web-based newsletter shall be established, and will serve as a venue for spreading information on project activities, special events, and key results.

Deliverables: Specific themes

For the comparative, synthetic analysis the POVFISH project (1 and 2) will be designed and coordinated so that all elements and relationships in the model are addressed. The themes to be highlighted, which may also form the various sections of the edited volume, are:

Model stream 1: Ecosystem damage, food insecurity

Articles will present empirical data and discuss the cause and effect of poverty and resource degradation based on the various case studies. Is it true that small-scale fishers contribute to

resource degradation? If yes, what are the causal factors and mechanisms involved? The articles will draw on the literature on common property resources and food security.

Model stream 2: Coping with poverty

Articles will analyze the ways in which fishing people are dealing with resource degradation and poverty. How do they perceive and cope with environmental risk? Under what conditions do they succeed or fail? The articles will present socio-economic data and draw on the literature of social capital, material (man-made) capital, networking and community development.

Model stream 3: Integrated coastal zone management, ecosystem based management

Articles will focus on the role of government, property rights, legal frameworks, and management institutions in ecosystem-based resource management. Empirically the articles will evaluate previous and current management initiatives. How effective have these initiatives been? What problems are occurring? How have fishers been able to resolve conflicts over scarce resources between communities and between small-scale and large-scale fishing? What explains their success or failure? Theoretically, the articles will draw on literature about issues such as co-management, marine protected areas, community-based management, indigenous human rights.

Model stream 4: Empowerment and community-based co-management

Articles will address the enabling role of management systems and their ability to build capacity and social capital as coping “technology”. We will draw on literature on empowerment, social capital, sustainable livelihoods, and local ecological knowledge. Management will here be seen from the perspective of the community, i.e. from the bottom-up, and data will be generated from interviews with male and female fishers, fishing households, community leaders/elders.

Model synthesis: The vicious circle of poverty:

The edited volume will synthesize POVFISH2 findings and generate theories on poverty alleviation and environmental degradation, i.e. covering the entire model. Can the vicious circle of poverty be broken and, if yes, how? Which factors and mechanisms - political, institutional and otherwise - provide food security/safety and economic growth/development within safe ecological limits? Here our ambition is to contribute to the general discourse (also within the auspices of United Nations/FAO) on poverty alleviation and small-scale fisheries by stressing the social and institutional issues involved. If community development and resource management must go hand in hand, how can one strike a balance? Is it possible “to eat the cake and have it too?”

Time schedule

Case-studies: 2008-2010

Research Handbook: January to March 2007

Kick-off meeting: March 2008

Synthesis meeting: November 2010

Book manuscript ready: June 2010.

Stakeholder meeting: January 2010.

Presentation at MARE conference “People and the Sea”: July 2009.

Advisory committee

POVFISH 2 shall have a committee of international experts to oversee the development of the project, as well as assist with advice at difference stages. The members listed below have all confirmed their willingness to join. They represent different academic disciplines (sociology, social anthropology, geography, economics, and biology).

- Dr. Ratana Chuenpagdee, Dept. of Geography, Memorial University of Newfoundland Canada.
- Ms. Kirsten Bjøru, Senior advisor, NORAD, Oslo, Norway
- Ms. Chandrika Sharma, Executive Secretary, International Collective in Support of Fisheries (ICSF), Chennai, India.
- Dr. Maarten Bavinck. Director, MARE Centre, University of Amsterdam, The Netherlands.
- Dr. Jesper Raakjær Nielsen, Director Institute of Fisheries Management (IFM), Hirsthals, Denmark.

Budget

Details are presented in the application form.

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