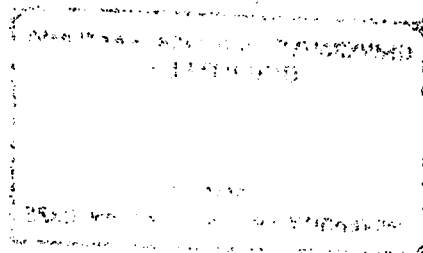


**THE MANAGEMENT OF PUBLIC-PRIVATE
PARTNERSHIPS IN RESTRUCTURING THE SOUTH
AFRICAN MARINE INDUSTRY TOWARDS
SUSTAINABLE DEVELOPMENT**



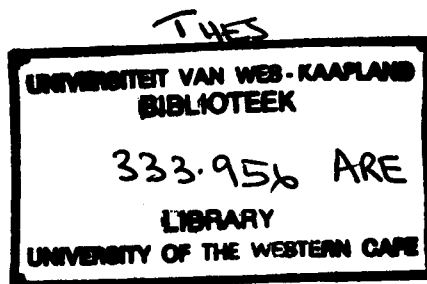
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PAUL ARENDSE



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**THE MANAGEMENT OF PUBLIC-PRIVATE PARTNERSHIPS IN
RESTRUCTURING THE SOUTH AFRICAN MARINE INDUSTRY TOWARDS
SUSTAINABLE DEVELOPMENT**

BY

PAUL ARENDSE

**A MINI THESIS REPORT
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE**



**IN THE FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES
IN THE SUBJECT**

PUBLIC ADMINISTRATION

**AT THE
SCHOOL OF GOVERNMENT
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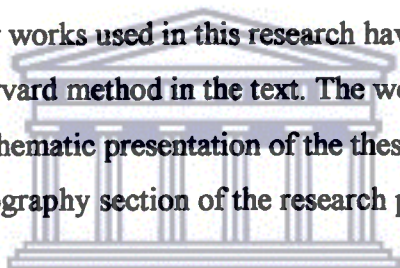
2003

DECLARATION

I declare that:

The research study undertaken in this dissertation is the original work of the undersigned author.

Ideas appropriated from other works used in this research have been acknowledged by cited references using the Harvard method in the text. The works with no specific reference but influenced the thematic presentation of the thesis are included in the alphabetically arranged bibliography section of the research paper.



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The research project concluded its final draft in April 2003 under the supervision of allocated research supervisor, Mrs. M. Esau (UWC).

Paul Arendse

DEDICATION

This work is dedicated to the pursuers of knowledge, whose noble occupation enlightens a vision of a cherished humanity. For far too long have coercive conflict and human insecurity stifled the bloom of human potential and value.



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ACKNOWLEDGEMENT

Bringing this research project to a close, I feel a sense of both relief and accomplishment and an enormous sense of gratitude to those who have assisted me along the way.

I want to offer my sincere thanks to the School of Government for their administrative excellence and prestigious academic program, and encourage their teachings and research in the promotion of good governance and democratic institutional systems.

The Department of Environmental Affairs and Tourism for their cooperation and time in assisting me in the information gathering process of my research. I hope this work enriches their endeavor to pursue sustainable development practices in marine resource management.

I owe much to the writers featured in the bibliography, for the knowledge generated in this research paper would not have been possible without their discovered ideas.

Holding the best for last, I am greatly indebted to my supervisor, Mrs. M. Esau, for her objective criticism and encouragement that inspired the most spontaneous creativity and added to the exactness of my research paper. I have learned much from her insight and ideas as we examined the implications of the research project. Her enthusiasm has made the whole process thoroughly enjoyable.

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ABSTRACT

In the dissertation entitled *The Management of Public-Private Partnerships in restructuring the South African marine industry towards sustainable development* the author explores the thematic study of sustainable development through Public-Private Partnerships. The setting of the research project is a southern Africa case study of the marine industry in South Africa.

The study develops a conceptual framework of how the contemporary discourse of sustainable development, namely, Public-Private Partnerships, could be applied in creating an environment for human security by restructuring its marine resource institutional economics towards community development enterprises.

The objective of the study is to develop a conceptual sustainable resource management model that proposes new institutional arrangements between social, economic, environmental and political actors and stakeholders in the marine industry through Public-Private Partnerships.

The thesis concludes to demonstrate how this resource management model result in equitable outcomes within the new institutional arrangements between the different actors and stakeholder in a Public-Private co-management system. It hereby applies the development discourse of Public-Private Partnerships in restructuring South African marine resource management towards sustainable development.

CHAPTER 1

INTRODUCTION

1.1 Introducing the Study

This research study focuses on managing marine resources within the parameter of sustainable development. This context calls for the improvement of the quality of life of people without increasing the depletion of natural resources beyond its capacity.

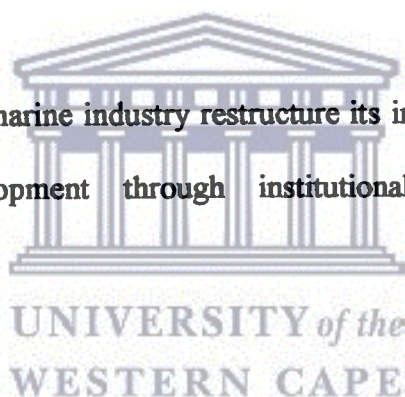
A normative observation within the marine industry derives a concept of development as the expansion of economic growth within the commercial sector. From the low life expectancy perspective of the community-fishing sector, the alleviation of poverty as a developmental principle within the reconstruction and development context of South Africa is much more prevalent.

The aim of this research report would be to explore how the two perspectives of development can be conceptually partnered into a developmental Public-Private cooperative partnership. It is an explorative approach that draws on a hypothesis that the co-management of natural resources through Public-Private Partnerships (PPP's) would contribute to the sustainability of the resource, and be the most effective institutional mechanism of sustaining human security.

Public-Private Partnerships is a contemporary discourse of development gaining worldwide attention as an alternative to centralized top-down regime management, as it integrates the expertise and experience gained by user groups with scientific advice and policy considerations at central level. This development discourse translates strictly economic variables of economic growth with poverty alleviation and community development that becomes an essential contribution to sustaining life in local communities.

1.2 Problem Statement

How can the South African marine industry restructure its institutional economics towards sustainable development through institutionalizing Public-Private Partnerships?



1.3 Guiding Hypothesis

An institutionalized relationship between Private (commercial sector) and Public (fishing communities), with Government as enabler and regulator, through Public-Private Partnerships (PPP's), would contribute towards sustainable economic growth and social development.

1.4 Objective of the Study

The objective of the study is to develop a conceptual sustainable resource management model that proposes new institutional arrangements between social, economic, environmental and political actors and stakeholders in the marine industry through Public-Private Partnerships.

1.5 Literature Review

Many writers have discussed the significance of managing the marine industry with the ultimate focus on sustainable livelihood. Isaacs (1998:26&96) writes:

A primary concern of fishery management is to address the relationship of fisheries resource to human welfare and the conservation of the resource for future generations.

Research in the field of fisheries management needs to address narrowing the gap between science, economy and community in managing the marine resource, that ultimately, will be beneficial to all stakeholders.

Isaacs introduces the sustainable development framework to the marine industry by suggesting that a multilateral resource management system develop a more efficient marine resource management regime. This would facilitate the equitable exploitation of marine resources to the benefit of industry, and the immediate

community that utilizes its value for sustaining their livelihood, within the biophysical environmental constraints of the marine resources.

In Platteau (1989) it is documented that case study research done on small-scale fisheries indicate this sector has great potential in contributing to employment creation as their private sector counterparts. But because their product contribution to the economy as a whole is less, past development efforts have focussed mainly on the large scale fishing industry. This situation has left local fishing communities around the developing world in absolute and relative poverty.

The research done by Isaacs (1998) identifies that local community involvement in marine management is lacking within the institutional design of the South African marine industry. The writer persuades that the situation in South Africa, especially within the context of alleviating poverty and community development increases emphasis on grassroots needs as perceived by the local fishing communities, and their competency to influence the marine institutional regime.

These opinions by Platteau (1989) and Isaacs (1998) raises the question as to how local fishing communities can participate within the marine resource industry for the purposes of their own social development, and as contributors to the economic development of the industry.

The answer is formulated in the work of Jenoft & Mc Cay (1995) who argues that regulatory processes of marine resource depends on inputs from both large and small-scale operators in the industry, within the institutional framework of marine management. This would include the structure and processes of government-industry interactions that relate to:

- Definition of stakeholders;
- Allocation of access to resource benefits; and
- Specification of mechanisms for decision and control.

It is also noted that institutions are social constructs within a social context. Thus the manner in which the institution is designed is reflected within the political context of the society. Within the social order of democracy, Jenoft & Mc Cay asks the question:

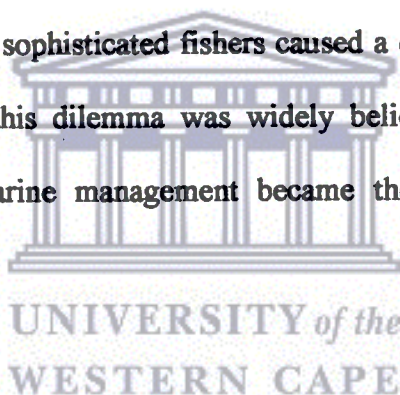
- How would marine resource user participation in regulatory policy formulation be instituted within a democratic social order?

The writers state that because this institutional arrangement within marine research is a neglected area, there is a need to explore the institutional aspects of marine management.

The management of highly variable and largely uncontrollable multi-specie resources, such as marine life, creates continuous crises in the discipline of resource management. The question that permeates over the efficiency of this sector's economic institution is:

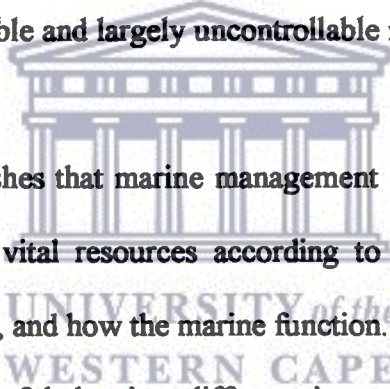
- How to balance the capacity of the natural resource environment, with the human need dependent on it?

Townsend & Wilson (1996: 311/12) explains that the evident overfishing in the early 50's by technologically sophisticated fishers caused a decline in international marine stock. The root of this dilemma was widely believed to be biological, therefore the science of marine management became the exclusive terrain of biologists.



Lowe (in Hara, 2001: 67) outlines that the biological rationale for management of marine resources is one in which the best yield of fish may be cropped each year over an indefinite period. To maintain the best yield meant that enough fish must be left for the stocks of fish to be maintained at a level required producing the optimal yield per year. This developed a theory of maximum sustainable yield (MSY), which aims at achieving maximum biological yield from the fishery into perpetuity. The practical use of MSY as a management reference point became widespread in the 1940's and 1950's, when the emerging and dominant thinking was the conservation of wild marine life.

Gordon (in Townsend & Wilson) in 1954 extended the multi-disciplinary field of marine science to include social science, when he argued that the root of the overexploitation of fish lie in the institutions and economic organization of the fishery. As long as access to the natural resources is open, no user has incentives to conserve the resource. The problem of management of an open-access resource is caused by the absence of the right to control the resource. Therefore the fundamental issue in the management of these resources is the nature of economic institutions. Wilson (in Townsend & Wilson, 1996: 323) describes the management problem as that of finding the institutional arrangement that promotes efficient adaptation to this highly variable and largely uncontrollable multi-specie resource.

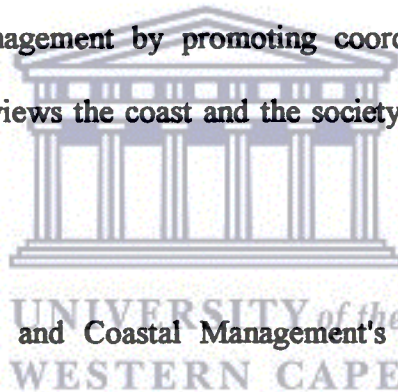


Jul-Larson (1998: 32) establishes that marine management is ideally a system that regulates people's access to vital resources according to the knowledge that is possessed about the resources, and how the marine function. Managing the resource institutionally is a question of balancing different interests against each other, facilitating negotiation and collaborating between relevant parties and groups. Therefore marine management would require the establishment of common norms and understandings of the need and the reasons for regulations. Marine management is therefore - just like politics - about institutional development and the building of commonly shared institutional practices.

Marine and Coastal Management is a branch of the Department of Environmental Affairs and Tourism, responsible for the administration of marine fisheries, and the

management of the associated coastal zone in South Africa. Its role is to guide the development and conservation of the marine and coastal environment and ensure the sustainable utilization of marine and coastal resources.

Informed by the White Paper on Sustainable Coastal Development (2000), the marine management system in South Africa is undergoing a process of restructuring from a resource-centered approach to a more people-centered management system of coastal resources. The previous system was fragmented, uncoordinated and largely managed on a sectoral basis. The White paper supports a holistic way of marine management by promoting coordinated and integrated coastal management, which views the coast and the society dependent on it as an integrated system.



For this reason the Marine and Coastal Management's Chief Directorate for Resource Management had to restructure its institutional arrangement to facilitate the management of the marine resources with integrated coastal management policies and activities. It therefore becomes the role of the directorate to manage sustainable and equitable development by integrating human needs and natural resources. Its function includes the facilitation and regulation of sustainable and equitable development and utilization of marine living resources, and to optimize the sustainable use of South Africa's coastal resources. The Chief Directorate has two affiliated directorates: Resource Management and Allocations, and Integrated Coastal Management and Development.

The research's frame of reference has been located within the directorate: Integrated Coastal Management and Development, for its proposed portfolio function: intertwines with the core aspects of the research study agenda of cooperative governance, partnerships and sustainable coastal industry development. Integrating these different component functions into the directorate's portfolio, correspond with the integrated management approach of the White Paper (2000). Its holistic system interprets the development of the community-fishing sector as part of the broader development of the marine industry.

The 'Sustainable Coastal Livelihood Study' (2002), commissioned by the Department of Environmental Affairs and Tourism, propagates a strong emphasis on institutional restructuring of the marine industry through co-management structures of Public-Private Partnerships. It is the view of the study that social development is interrelated with economic development, and support to relieve the dependency and over-exploitation of the coastal marine resources.

During the period (2001-2002) the study was undertaken, the Directorate: Integrated Coastal Management and Development had not yet been legally enacted by the parliamentary system of South Africa, and therefore did not have a structured legal mandate and operational budget. This highlights the question of how to devise an institutional mechanism that would facilitate the cooperative governance between public and private partners for sustainable development.

The research problem statement is therefore operationalized as the Directorate: Integrated Coastal Management and Development needs to find an institutional model that would restructure the benefits of the marine industry towards social and economic development, within the biophysical environmental constraints of the marine resources.

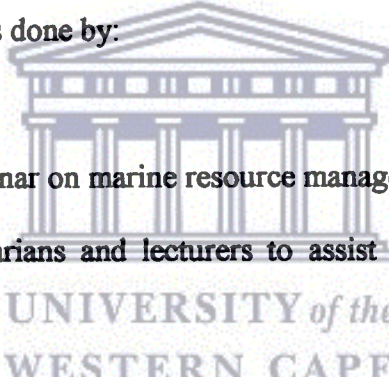
1.6 Research Methodology

Operationalization

The research is operationalized by investigating the Directorate: Integrated Coastal Management and Development, as it needs to find an institutional model that would restructure the benefits of the marine industry towards social and economic development within the biophysical environmental constraints of the marine resources. This was done by unstructured interviews with key informants at the directorate for background information and current developments within the department. The unstructured interview method was used to open up discussions to the perspective of the informant's knowledge and taking the lead of questioning as the interview progressed.

Description of Data Collection

The research methodology employed in the research project was mainly of a qualitative secondary nature, by reviewing relevant literature on the marine industry and its policy context in South Africa. The investigative framework of sustainable development was used in assessing how applicable the concept of Public-Private Partnerships (PPP's) in local community development enterprises is, in empowering local economic development in the South African context of economic redistribution of resources, and how it can be instituted in the marine management regime. This was done by:

- 
- Attending a lecture seminar on marine resource management in South Africa;
 - Consulting subject librarians and lecturers to assist in identifying relevant sources of information;
 - Utilizing the Department for Marine and Coastal Management's research library to locate research sources;
 - Interviewing managers at the Department for Marine and Coastal Management's:
 - i. Chief Directorate: Resource Management
 - ii. Directorate: Integrated Coastal Management and Development
 - iii. Subsistence Fisheries Management Unit

- Consulting Internet sources through search engine scanning using the key words of *Public-Private Partnerships, sustainable development* and the *South African Marine Industry*;
- Reviewing topic specific academic literature, journals and newspaper articles;
- Content analysis of television news and actuality programs on sustainable development and the South African marine industry.

Method of Data Analysis

- The research's point of departure was the review of literature that explores the developmental application of the concept 'Public-Private Partnerships', and why it's a viable option for South Africa to employ in their marine resource management strategies;
- Drawing on marine industry profile reports, its industrial restructuring process, and policy documentation, an analysis was formulated of the South African marine industry;
- Based on the development needs drawn from the South African case study, a 'Public-Private Partnership' theoretical framework was formulated by extending the research agenda the review of literature on development economics, the empowerment paradigm and institutional building that would enlighten the institutionalization of Public-Private Partnerships in resource management.

- Synthesizing the theoretical framework of Public-Private Partnerships and the case study analysis of the marine industry of South Africa in supporting the development of PPP's, an institutional model was designed to propose the recommended co-management institutionalization and the projected outcomes of Public-Private Partnerships.

1.7 Organization of the Study

The study is organized as follows:

CHAPTER 1

Introduction

The introduction provides the conceptual framework in which the research design is formulated to restructure the South African marine industry towards sustainable development through Public-Private Partnerships.

CHAPTER 2

The evolution towards the Public-Private paradigm

This chapter develops the theoretical foundation on which the empowerment strategy of Public-Private partnerships will hold its empirical validation.

CHAPTER 3

A case study of the South African marine industry

The South African marine industry is analyzed to assess and indicate its prospects for Public-Private Partnerships in assisting the developmental needs of the industry.

CHAPTER 4

Findings and recommendations

It is envisaged through the synthetic integration and analyses of the research findings, to formulate the thesis that provides an institutional model for Public-Private Partnerships in the marine industry of South Africa.

CHAPTER 5

Conclusion

The study concludes with a summary of the research findings.



1.8 Defining the Terms

- *Institutional Economics*: The transactional cost and outcome measurement between stakeholders within an institutional framework.
- *Public- Private Partnerships*: A multilateral policy development relationship between the private and public sector to enhance and sustain economic and social development.

- *Public-Industrial Policy*: An industrial sector social responsibility policy that supports development projects in partnership with local government and civil society, thereby enhancing the delivery of social services to local communities.
- *Business-Community Organization*: An industrial sector social investment unit that plan community development policies and programs that would alleviate poverty by improving and developing local infrastructure and enhancing community support systems in local communities.
- *Community Development Enterprise*: An industrial sector policy that has a social development outcome.
- *Participatory Governance*: An administrative process of collaborative social and institutional learning, based on joint decision-making that aims to introduce maximum transparency, sharing of information and value outcomes between all stakeholders.
- *Co-management*: The institutional framework for participatory governance.
- *Sustainable Development*: The institutional mechanisms that would manage development on a continuous measurable scale that is self-sustaining towards its envisaged policy outcome.
- *Integrated Policy Development*: The cooperative process that facilitates a negotiated framework to more sustainable and inclusive governance of social, economic, political and environmental systems.
- *Economic Empowerment Growth*: The perspective on industrial policy that stimulates social creativity and economic stability, maximizing both individual

and social benefits in the access to and widening of, basic life-sustaining goods and services.

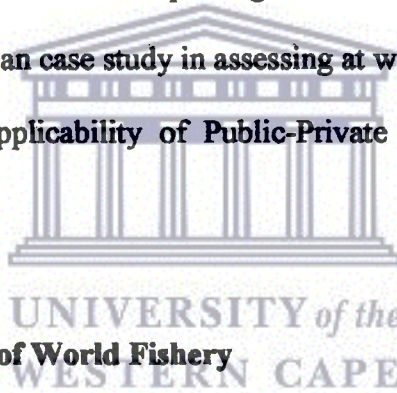


CHAPTER 2

THE EVOLUTION TOWARDS THE PUBLIC-PRIVATE PARADIGM

2.1 Introduction

Developing the theoretical premise on which the empowerment strategy of Public-Private Partnerships will hold its empirical validation, it would be important to consider how development practice evolved towards this paradigm. Its evolutionary stages would guide the analysis of the South African case study in assessing at what stage of development the marine industry is, in the applicability of Public-Private Partnerships to the marine management regime.



2.2 Historical Background of World Fishery

The historical evolution of the marine industry draws on a body of knowledge that investigates how essential fish as a food diet is to the human society, and how industries were built around this natural resource.

Chaussade, in the preface of Le Sann (1998) provokes a future where humankind will become more dependent on marine resources to solve the food security problems of the twenty-first century. This comes in the wake of declining agricultural production capacity as a result of atmospheric changes and the deterioration of the earth's soil quality.

Le Sann (1998) states that as food, fish is particularly healthy and nutritious. Quite apart from its calorific value, it is a source of easily digestible, high quality protein. Rich in amino acids, calcium, phosphorous, iron and vitamins A and B. It has the capacity to enhance the diet of the poor populations around the world, where cereals and root vegetables comprise the staple food. As a supplement, fish thus helps prevent disease associated with nutritional imbalances.

From Greenpeace (1994) in Le Sann, worldwide, fish constitutes the principle source of animal protein: humans directly consume 70 million tons. This figure is higher than the figure for pork (60 million tons), beef (50 million tons) and poultry (32 million tons). According to Greenpeace, sixty percent of the populations in the South obtain 40 percent of their animal protein intake from fish.

Bennet (2000:2) writes that the marine industry plays an important role in the local and national economies of many developing countries, where they provide food, income and employment for large sections of the population. The writer describes that following the Second World War; the rapid expansion of fishing capacity in many developing countries was promoted through the advent of new fisheries technology. These new fishing technologies and fishing methods coupled with a desire to improve nutrition and generate foreign exchange led many countries to build on fishing activity already present. Bennet states that some of this development was part of national development programs, in other cases, international loans and funding programs helped promote the development of national fishing industries. As a direct result of this drive to develop national fishing

capacity, the participation of developing countries in global fishing activity rose dramatically between 1955 and the 1980's. The writer describes the rewards to be gained from participating in the global marine market as potentially large, and many benefited, albeit in the short-term, from their forays into fishing. Increased export-revenues and the multiplier effects associated with expanding industries all helped boost the development of many developing coastal countries.

2.3 The Phases of Development Practice

Hyden (1993) has developed a theoretical framework in which to analyze development approaches, based on the exchange between First and Third World countries over the past decades. The writer expresses an opinion that development, as a theory, is the approach to public affairs where civil society establishes institutional means that would cater to the needs of their concerns. Etzioni (1998) affirms this view but asserts that this kind of development prescribes an empowering social environment, for it requires a knowledgeable society to influence how policy is developed and how it applies to their needs.

Adapted from Hyden, the period between 1955 and 1965 saw the discourse of development mainly from an economic perspective, where finance and expertise were injected into developing countries through projects for people.

From 1965 to 1975, a dependency developed on this aid supplied to developing countries, without them taking ownership or responsibility. This prompted international financial institutions and donor organizations to put pressure on developing country governments to formulate programs where their people become involved in identifying their own development needs.

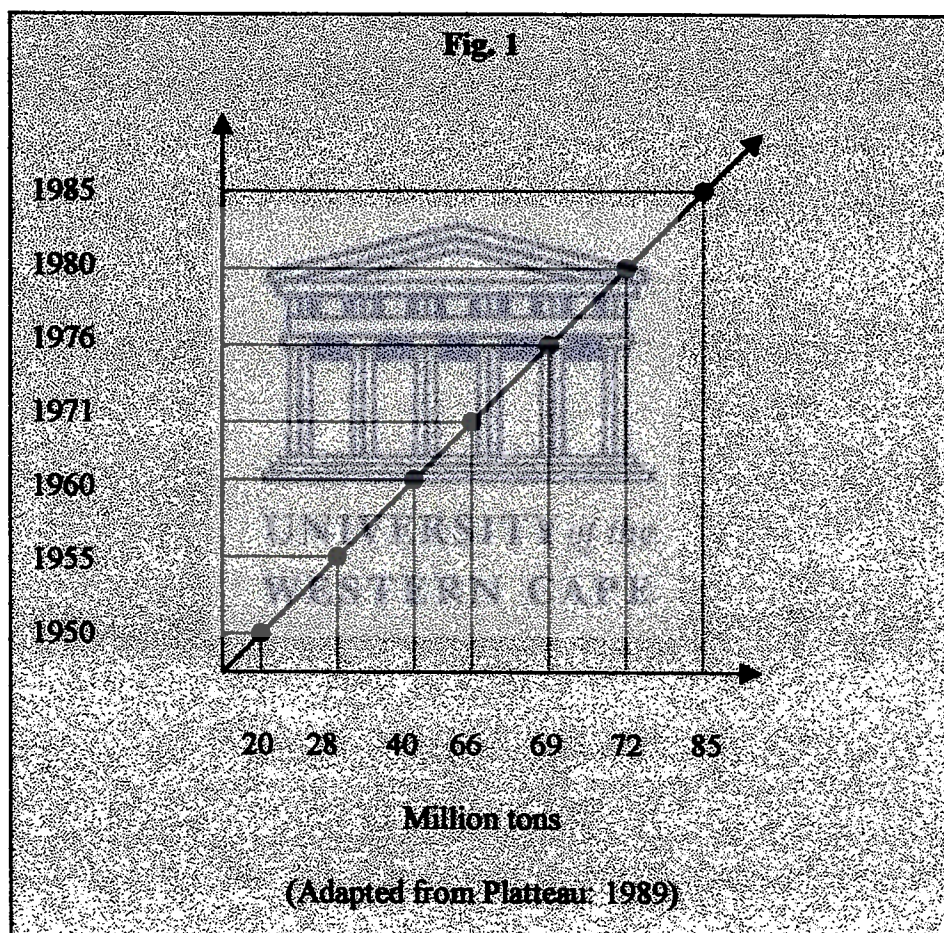
These development programs encouraged the formation of civil organizations in the 1975 to 1985 period. Public policies were therefore needed to guide this new relationship between government and organized civil society.

With the rise of civil organizations and public policies to guide their relationship, the period between 1985 to 1993 saw the role of government as the enabler and regulator. The state's role was to create an enabling institutional environment for civil society to make meaningful contributions to policy formation and implementation.

The phases of development practice were incremental, with each approach building on each other towards efficiency. Therefore an evolutionary pattern can be deduced where the first stage would be dependency, from which independence is built, and from where interdependent institutional building is created that would enable popular civil participation in policy processes.¹ A central interpretation of the evolution of development practice would be that it evolves towards an inevitable system of participatory governance.

2.4 The Application of Development Practice to Marine Resource Development

The rapid increase in the demand for international marine resources, illustrated in Fig.1 during the period 1950 to 1985, was due to the technical improvement of method and techniques of marine resource operations:



The industry's proficiency to extract luxury species caught in the waters of developing countries developed a rich customer base in the first world countries. This export demand

¹ Note how the pattern of theoretical logic followed by the phases of development practice correspond with the biological growth pattern of human beings, evolving from its childhood phase of dependence to the

for developing shore resources motivated the industries of these countries to embark on ever more efficient and highly technical marine operations aided by first world expertise and finance. This process marginalized traditional and small-scale fishers by focusing on private producers to pursue the growth towards an export directed industry to supply the high world demand for tropical fish resources.

Now that the developing world's marine industry has been established through their export driven market, applying Hyden's development theory to practice, the next phase of marine development would be the institutionalization of participatory governance in their marine industry. This process would prospectively sustain the marine resource and regulate the developmental relationship between public policy, private producers and the local fishers, originating the concept of co-managing the marine resources. In Jenoft & Mc Cay (1995: 229) the principle element in this approach is the participatory institutionalization of decision-making and responsibility between user groups and government agency.

2.5 Marine Resource Co-management

It has been the rationale of marine resource management to balance the sustainability of the resources available to support its ecosystem, and the needs of people in utilizing its value. Therefore the management principles that can be deduced from the sustainability factor, would be to consider scientific and user knowledge of the resource, into the policy formulation and regulatory framework of marine resource management.

*interdependence of adulthood.

Combining stakeholder knowledge inputs into the management system, not only improves the science of managing resources, but also legitimizes the process by bringing it closer to those that are affected by the regulations, thus enhancing compliance (Hersoug & Ranes, 1997:159). This operationalizes marine management systems to direct the behavior of marine resource users, towards obtaining the goals and objectives of the sustainability principle of resource management.

Marine resource management has in the past been managed through a centrally controlled institutional system, with a one-way directed top-down structure. This system has proved to be prohibitively costly to sustain, due to its illegitimate enforcement of regulations on users without their involvement in the decision-making process (Hara. 1999:9). According to Hara (1999) the last ten to fifteen years has proved that this kind of state-run institutional system has not been producing the intended goals of sustainable exploitation of the marine resources.

As a case in point, Isaacs (1998:33) writes that the current crises in South African marine management can be attributed to the lack of legitimate management systems, thus the non-compliance with permit conditions and the continued illegal fishing practices. The writer stipulates that if one considers the amount of local fishers that are not taken into consideration when it comes to marine management, the cost involved with potential illegal activities will further tax the already limited capacity of government, in controlling and sustaining the marine industry.

Deducing a definition from Pomeroy & Williams (1994) and Hara (1999), co-management would be defined as the institutional partnership between all stakeholders. This would include regulatory agencies such as government and police; resource users such as private industry, local fishers, fishing communities, traders, business suppliers and consumers; and community development agencies such as non-government organizations. As appropriate to each context, these stakeholders should establish a socially controlled system that would regulate the sustainable utilization and management of the resource within a specific local territorial context.

From the definition mentioned, it becomes obvious that co-management would only be possible if government is committed to the principle of decentralization and participatory governance. Because it would be the role of government, according to Pomeroy & Williams (1994), to provide the necessary enabling legislation to facilitate and support the right to organize and make marine resource management arrangements at the local level. This initiative does not come without the physical assistance and services to support the maintenance of these local arrangements.

According to Hara (1999:14) the presumed implications of an ideal co-management arrangement are that it would result in a participatory and consultative process, which broadens the scope of knowledge that would inform policy decision-making.² This results in better regulations and legitimizes the regulation system. The preceding outcome would

² This intent is inline with the contemporary notion of building learning societies in where knowledge and the creation thereof is a continuous evolutionary process where reflective feedback is channeled into a participatory administrative system making it more proactively efficient in its ever-changing social context.

be greater adherence to regulations. Thereby resulting in a more proficient system, and an efficient management regime.

The advantages of co-management is stipulated by Pomeroy & Williams (1994) as:

- Lower management and enforcement costs.
- Improved data reliability.
- Higher degree of acceptability and compliance with management levels.
- Greater participation of fishers in management.
- Improved social cohesion.
- Community development.



Isaacs (1998:32) summarizes the key conditions for successful marine co-management as:

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- Clearly defined membership for effective communication and decision-making.
- A sense of group coherence.
- Involvement of existing organizations.
- The participation in decision-making arrangements by all those that are affected.
- The enforcement of management rules (monitoring, control, surveillance of the resource).
- The legal right to organize.
- The co-operation and leadership at community level.

- The decentralized delegation of authority and coordination between government and community.

2.6 The Development Economics of Participatory Co-management

The institutional outcome of development practice's participatory co-management regime introduces development economics that seeks to bring about the equitable administration and distribution of scarce resources towards sustainable livelihood development. The work of Harrison & Naidoo (2000: 119) prescribe that for the economics of development to take place, there would need to be an institutional transformation and economic restructuring of the economy away from private interests, towards social empowerment.³ The emphasis within this paradigm is the diminishing distinction between what is normally interpreted as the public sphere of public policy and the private realm of economic policy. Larkin (1994) combine their relation into what is defined as Public-Private Partnerships.

In Brandshaw & Blakeley (1999), local economic development in the context of Public-Private Partnerships creates linkages between economic opportunity and public human resources, to help local entrepreneurship identify new institutional collaborations that would result in new markets and business opportunities. Many of these partnerships are aimed at building institutional capacity that reflect community and business

³ This developmental strategy propagated is read as a voluntary consultative process taking in consideration the historical social context of the development aimed at, and not to be a forcedly coerced action, as the latter would create an ideological debate between the coerciveness of socialism and the freewill of capitalism.

collaborations designed to increase competitiveness and curb the growth of monopoly ownership of the industrial sector concerned. Public-Private Partnerships therefore propose a combination of public-industrial policy, with business-community organizational structure that would facilitate local community and economic development. Brandshaw & Blakeley assert that these collaborative partnerships between business, community and government in public and economic policy formulation have high potential of stimulating even other sectors of the economy.

Anand & Sen (2000: 2032) interpret this industrial expansion as a stimulant to increase the range of human choice. Klaus (1997: 164/5) advocates that broadening and building on local customer choice localizes production for local markets, which facilitates a desirable long-term stabilizing perspective on industrial policy, that leads to more know-how transfer to the local entrepreneuring work-force. The net result produced from Colclough & Manor (1991) is that it maximizes both individual and social benefits that are translated into the widening of the distribution of basic life sustaining goods. This raises the levels of living and community development which includes better education, higher incomes, the provision of more jobs, greater attention to cultural and humanistic values, which serve not only to enhance material well-being, but also generate social esteem (Todaro, 1997:18).

The development economics of Public-Private Partnerships translate strictly economic variables of economic growth with community development that becomes an essential contribution to sustaining life in local communities. Colclough & Manor (1991:20)

interprets this new wave of economic institutional restructuring as empowerment growth that maximizes labor absorption beyond short-term profits and stimulates stability and economic growth within the particular industrial sector.

The stimulus of Public-Private Partnerships on development within the particular developing industrial sector, is when the commercial sector assists the local entrepreneurial sector to become commercially viable by adopting it as a developing partner. Todaro (1997) describes that the transition from local economic development to commercial industrialization is highly dependent on this kind of the social, commercial and institutional conditions under which it operates. This entails the redistribution of ownership away from large industrial owners to local non-owners in the industry. According to Todaro (1997:327) redistribution not only increases local empowerment and raises local incomes, but also leads to greater industrial production and more efficient resource utilization. The full benefits of small-scale economic development cannot be realized unless government support systems are created that provide the necessary incentives, economic opportunities, and access to needed inputs to enable local actors to expand their output and raise their production.

By restoring a proper balance between big and small-scale economic opportunities, and by creating the conditions of broad popular participation in economic and industrial development, an initiative towards the realization of the development economics of PPP's is undertaken.

2.7 The Sustainable Livelihood Prospects through Public-Private Partnerships

The development economic framework of Public-Private Partnerships produces a sustainable livelihood ethic, which raises the prospects of institutional-building of collective action, cooperation and social learning to meet the constraints of sustainability.

In Berkes & Folke (1993) sustainability interlinks natural capital, which consists of non-renewable, renewable and environmental services; social and human capital⁴, that which produces the means of production; and cultural capital that refers to how people view and interpret the world. Berkes & Folke emphasize that these three interrelated types of capital form the basis for guiding society towards sustainability. From a systems point-of-view, which interprets the interrelations of things, they are clearly interrelated, as they all pertain to adaptations that deal with natural systems of which human systems are a part, and on which the long-term sustainability of the human specie depend. Together they shape the way in which society interacts with its environment, and defines and uses natural capital.

Constanza (1991) identify the human specie as having the guardianship role within this natural system of things described by Berkes & Folke (1993), responsible to interpret and understand their purpose in managing the social-economic-environmental system for sustainability.

⁴ Social capital is the infrastructure that facilitates the skill development, knowledge and ability for human capital (the individual) to create its environment.

Interpreting the role of humans as environment creators and custodians, Rahman (1993:224/5) writes that economics as a science of administering scarce resources has the potential value in serving human aspiration through interpreting economics as a facilitator of social creativity. The economics of social creativity is contrary to the consumerist view of development, in that it empowers local actors to create the aspirant needs of their environment. It draws on the values to share and care with and for others, and ensures that development does not take place by retarding the development of others. According to the writer the consumerist view of development regards the human being primarily as a consumer of goods and services. It's a view of unequal resource distribution, within a world where only elite sectors of the population have the means to initiate the production of goods and services.

'If creativity is an essential element of human nature, what then happens to the other sections of the population in the unequal resource distributory society?'⁵

This sector of the population is classified as poor, for they do not have the means of producing and consuming through their own creative acts. Therefore according to Rahman (1993) the development of human creative abilities and their fulfillment in economics, social and cultural spheres are perhaps the most basic element of human development and empowerment. The empowerment problem is thus not one of delivering a material bundle of goods to the 'poor', but of facilitating the maximum scope for the

⁵ This is a very important highlight as it questions the notion that society is made-up of distinct social classes such as workers, thinkers and producers. It makes the point that everyone has the potential to be in control of their destiny and circumstances, and therefore up to the individual to achieve the best of their

people's creativity, enabling them to create their self-chosen bundle of goods, including cultural and intellectual pursuits according to their own wishes. For this social creativity to be operationalized within society, people would need a well-developed self-esteem and believe in themselves to discover and make use of their best, most creative and humane response to their situation. Therefore people, especially the poor and the marginalized, need to be invited and empowered to relate with anyone and with any institutional structure horizontally, as equals, and not vertically as subordinates (Rahman, 1993:210).

This empowering environment highlights the role of government and the management of institutions, as it reflects the governance philosophy of its society. Rahman (1993) writes that the central lesson of the past century's experiments with social governance through the instrument of nation states, is that it systematically undermined and disempowered the people's own governing abilities. Durie (in Loomis, 2000:903) claim that indigenous populations, before the establishment of the state system, interpreted their existence as integrally related to nature rather than dominant over it.

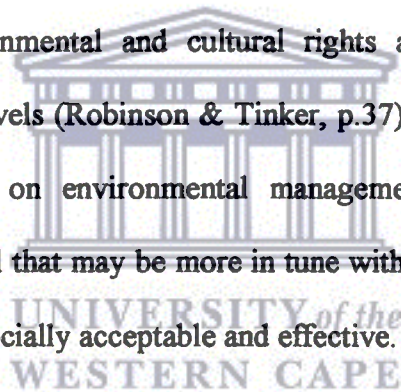
Schneider (1999:522) identifies that the philosophy of the state and its conventional definition of governance as the 'exercise of authority and control in a society' in relation to the management of its resources for social and economic development, does not explicate knowledge problems of information and agency. Thus by implication according to the writer it is assumed that decision-makers (central or local government) have perfect or at least sufficient information about existing resources, needs, ways and means for

ability in a free society. It therefore becomes the responsibility of the social governance system to create this enabling environment for the development of this human phenomenon.

meeting those needs. Though in reality, information is unevenly shared and asymmetric among different levels. People outside government and the bureaucratic structure of society may hold information to which the latter have no or complete access.

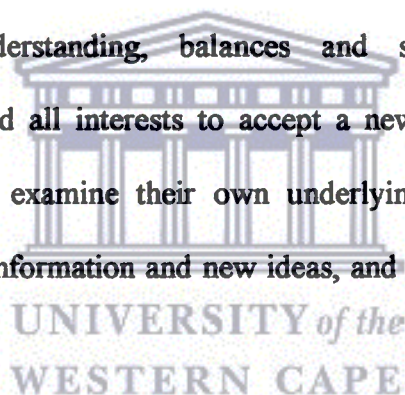
Public-Private participatory governance aims to overcome these problems of inefficient and disempowering institutions, by introducing maximum transparency and sharing of information in a process that include all stakeholders and leads to joint decision-making wherever feasible. Schneider (1999) states that the rationale for Public-Private participatory governance is that it's more holistically equipped with better information that guide to more effective decision-making and more efficient outcomes. The fact that various kinds of information are held and supplied by various stakeholders in a participatory process increases the chances of them taking ownership in, and becoming committed to the outcome of the decision-making process. As a consequence, the results of the process are sustainably enhanced. Schneider (1999:534) advocates that Public-Private governance holds out the promise of increased effectiveness and efficiency in poverty reduction, and thus ultimately higher economic and social sustainability. The writer describes the role of government as an enabler that provides vision and impulse through effective commitment and leadership that mobilize resources together with others. Thereby facilitating a process which will be driven jointly by many stakeholders in the mode of partnership, and in ways that are responsive to changes in the situation of the poor, and the socio-economic environment in which they live.

Robinson & Tinker (in Schnurr & Holtz, 1998:35) interpret the degree to which global economic integration, as currently practiced, tends to decrease the sense of community, social coherence, and governability. Owen (in Schurr & Holtz, 1998:128) elaborates that in this complex scenario of globalization, people want to be closer to the decision-making process and have a voice in defining the public interest, particularly where decisions affect them directly. These calls for localized decision-making suggest a need to consider local social, cultural, and environmental matters as an interlinking system of concern. This approach would require an innovative form of contact, whereby larger decision-making units are delegated to smaller jurisdictions in return for legally binding agreements on basic environmental and cultural rights and responsibilities at both individual and community levels (Robinson & Tinker, p.37). This would allow for more local political involvement on environmental management and cultural-community development at a spatial level that may be more in tune with immediate experiences, and thus more likely to be both socially acceptable and effective.



Bernand & Armstrong (in Schnurr & Holtz, 1998:46) states the aim of Public-Private governance and integrated policy development is to better understand the scope of the changes occurring, and to create more democratic mechanisms to frame problems and reach consensus. The process can be seen as a cooperative search for a negotiated path to more sustainable and inclusive governance of social, economic and environmental systems.

Owen (in Schnurr & Holtz, 1998:134) states that achieving the integrated policy framework of Public-Private governance require a dynamic relationship among all stakeholders as they test policy decisions throughout their implementation against new information and experiences. Relations among competing interests developed through the shared decision-making process promote stability, as the balanced collaboration process and the relationship increase understanding and respect that promote flexible adjustments to new information and experience. Owen does not ignore that conflict will occur in this diverse meeting of interests and information sharing. According to the writer conflict can be delimiting, but can also be a creative force if it induces an enriching variety of perspectives, broadens understanding, balances and syncretize results through collaboration. Crises can lead all interests to accept a new approach, but it can also challenge them to carefully examine their own underlying assumptions, values and beliefs in the light of better information and new ideas, and see whether adjustments are needed.



In the context of natural resource management, Berkes (in Singh & Titi, 1995:14) writes that nation states have ultimate jurisdiction over all natural resources. In its role as the legitimate equitable regulator among interdependent groups of natural resource users, it would be their responsibility to create the enabling environment for Public-Private participatory resource management. This would include the need to incorporate local institutional-building, to enhance the capacity of communities to be involved in the participatory institutionalization of Public-Private co-management partnerships.

2.8 Creating an Enabling Institutional Framework for Public-Private Partnerships

PPP's are geared towards a participatory governance regime within a developing economic sector. Johnson (in Wohlgemuth, Carlsson & Kifle, 1998:60) writes that no program should be planned without the whole industrial sector being involved, both as an integrated organism and as a part of its environment. The interrelationship between the institution and its environment is a critical component of sustainable development at a local level. Therefore according to Brinkerhoff & Goldsmith (in Brown, 1998:56) sustainability is ultimately dependent on how institutions are structured.

Hartzius (1997) states that institutions condition human behavior and regulate the interaction between actors within a particular social or geographical unit. The sets of formal and informal rules that regulate the transactional costs between different actors develop the institutional culture within which they operate (Agrawal & Gibson, 1999:637). Representing restrictions and options at the same time, institutions provide incentives and define the decision space of actors. Thereby reducing uncertainty about the behavior of other actors. Institutions and the information they possess facilitate individual and collective decision-making as well as coordination and cooperation between different actors. According to Agrawal & Gibson institutions therefore promote stability of expectations and consistency in action.

Incorporating sustainable livelihood strategies in the Public-Private Partnership institutional design emphasizes the role of people in development. In Lemare (2000:2)

the emphasis on the role of people is framed within the assumption that people are in the best position to assess their own situation and have to be given the opportunity to participate in the development of their immediate environment. Therefore the sustainable development principle of instituting PPP's would be to facilitate a relationship between its activity and its institutional community towards a cooperative common goal. Lemare states that a key aspect of Public-Private institutional development is to remove constraints to realizing human potential and adjust the development focus to institutional poverty reduction.

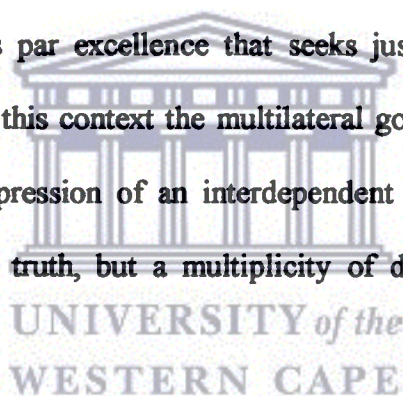
As poverty has been described as the lack of opportunity in expressing creative solutions to local problems, Dobell (1998) advocates the development of the institution's social capital in a learning institutional environment as a means of improving general social and economic performance and institutional value changes. Dobell states that a central proposition is that Public-Private institutions must be structured so as to align individual incentives with the institutional community objectives. Learning within this institutional context (Brown 1998:64) is a social process involving collaborative reflection on action. It takes place through feedback, exchange of information and questioning, reflection on and reformulating values and premises in terms of how they affect the institution's goals and objectives. Social capital development is empowerment that creates a knowledgeable participator in influencing how policy is developed and applied. Dobell describes the institutional environment essential for social capital empowerment:

- To build trust in a process that leads to a shared outcome that participants recognize is in their own interest as well as the interests of everyone else within the institutional framework.
- To communicate in the language and meaning most comfortable and authentic, so that all participants can gain power through self-respect and self-identification. This in turn means building on self-esteem and self-confidence.⁶

Empowering local social capital within the Public-Private institutional partnership context, can also be provided by the cooperation between a local institution and a homologous, but more advanced institution, called institutional twinning (Johnson in Wohlgemuth, Carlsson & Kifle, 1998:58). Vink (1999:68) mentions that institutional twinning and cooperation are arrangements between two similar institutions that promise to assist each other as equal partners over a period of time. According to Johnson (in Wohlgemuth, Carlsson & Kifle, 1998:58), institutional twinning collaborate through personnel exchange, training, equipment support, long-term expertise and short-term consultancy services. These positive features assist the local developing institution to acquire a broad range of relevant knowledge and resources from an agency with similar responsibilities and internal organization. Johnson advocates that in order for the twinning process to be successful, both twins must be prepared to undertake a common learning process, as technology, culture and attitudes cannot simply be transferred from one context to the other.

⁶ It would therefore become important for the PPP institutional culture to facilitate multilingualism to develop this communication empowerment between its institutional members.

Local development, institutional learning, institutional social capital development, and institutional twinning all involve the interactions of diverse actors that need to participate within an on-going horizontally interactive process of compromise. In Borrini-Feyerabend (2000) this system of administrative governance where multiple social actors negotiate on the fair sharing of responsibility develop the conditions for Public-Private co-management institutionalization. It is a pluralist approach to management in a multilateral governance system of administration that incorporates variety of partners in a variety of roles, generally to the end goal of equitable sharing of resource-related benefits and responsibilities. Borrini-Feyerabend describes Public-Private co-management as a political and cultural process par excellence that seeks justice and democracy in the management of resources. In this context the multilateral governance of Public -Private Partnerships becomes the expression of an interdependent institutional culture, which realizes that there is no one truth, but a multiplicity of different options, which are compatible.⁷



The writers Hilhust & Aarnink (1999:9) states that mutual understanding among actors within this multilateral system regarding rights, rules, obligations and responsibilities can provide a strong base for a sustainable management system. Touchman (in Hilhust & Aarnink, 1999:15) mentions that a participatory approach towards management reinforces sustainability of resource use and more equity in the generation and distribution of benefits. Public-Private co-management as a managerial approach to

⁷ Note that at this point there is a synthetic consensus between the interpretation of the final phase application of development practice propagated by Hyden (1993) on p.20, and the theoretical value of participatory co-management.

institutions offer a middle course between management concerns of efficiency and equity, and local level concerns of active participation in decision-making.

In Brelsford & Mc Farland (1996) co-management systems attempt to bridge the cultural difference between local actors and managers, particularly through commitments to consensus decisions and consideration of both local and scientific knowledge.

Borrini-Feyerabend (2000) mentions some basic conditions for co-management to develop:

- Full access to information on relevant issues and options.
- Freedom to express needs and concerns.
- A non-discriminatory social environment.



Brelsford & Mc Farland (1996) contribute in adding that co-management should:

- Ensure that management bodies recognize and respond to community observations and consider them in decision-making processes.
- Involve local people in research.
- Provide funding to locals for documenting traditional knowledge.

Touchman (in Hilhust & Aarnink. 1999) mentions the benefits of co-management as:

- Building more appropriate management systems.
- The merging of different sources of knowledge and experience, resulting in better-informed regulation.
- More cost-effective, as transactional costs relating to implementation, monitoring, enforcement and conflict resolution are lower.

Brelsford & Mc Farland (1996) observes similar outcomes:

- Sharing responsibility for management.
- Balancing power relations between goals and management.
- Local actors taking responsibility for management decisions.

As already mentioned, the Public-Private co-management system is apt to conflict in the diverse meeting of interests and information sharing of multiple stakeholders. In Bennet (2000:5) conflict is a situation of non-cooperation that involves groups of people with differing goals and objectives. Therefore Borrini-Feyerabend (2000) advocates a conflict management system that guides conflict towards constructive rather than destructive results. It's a process that promotes dialogue and negotiation, which implies:

- Taking care of disagreements before they generate hostility.
- Helping the institutional actors to explore a multiplicity of options for agreement and subsequently select an option everyone can live with.

- Recognizing and intervening in the underlying causes of conflict with a view to prevent them in the future.

2.9 Summary

Applying the principles of development practice to understand the evolution and sustainability of marine resource development prescribed an institutional arrangement of participatory co-management between public-private stakeholders. This participatory co-management regime conceptualized within development practice evolved a development economics system, which introduced the Public-Private Partnership paradigm. It formulated a framework on how economics as an institution of administering scarce resources can be restructured to facilitate and accommodate community development. This perspective partners public policy and private economic interests in a collaborative relationship to stimulate local economic growth and sustainable livelihood development.

Sustainable livelihood development in reference to poverty alleviation drew attention to the interpretation of poverty. Here the view of poverty was interpreted as a consequence of a social environment that stifled social and human creativity. It was suggested that through Public-Private Partnerships local people would be empowered to participate as equals within the institutional framework of decision-making that concern them directly.

Guiding the institutionalization of Public-Private Partnerships, perspectives on the mechanisms of multi-stakeholder institutions and how it can be utilized in local

community development that is focused on poverty alleviation were investigated. It verified Public-Private participatory co-management as the appropriate developmental regime within the contemporary social dimension of interdependence, and the consensus driven managerial approach to social and resource governance.



CHAPTER 3

A CASE STUDY OF THE SOUTH AFRICAN MARINE INDUSTRY

3.1 Introduction

The South African marine industry will be analyzed to indicate its prospects for Public-Private resource co-management that is geared towards sustainable development. Aspects to be considered in the analysis includes the following:

- Its resource environment and economic value;
- Analysis of the historical background of the industry;
- The identification of the main stakeholders that would be part of the Public-Private Partnership institutional solution;
- The policy context of the marine industry.

3.2 Marine Environment

The Marine Living Resource Act (1998) establishes that South Africa has a coastline of 3000km, and an exclusive economic zone of national and regional boundaries extending 200 nautical miles to sea. Within this marine environment South Africa has jurisdiction over all marine resources, including exclusive rights and responsibilities for their exploration, exploitation and management.

3.3 Self-sustaining Ecosystem

In Kavita (2000) it is described that the eco-space within the territorial waters and exclusive economic zone of South Africa is one of the most dynamic ecosystems in the world. While hosting 16% of the world's species of fish, evident of its abundance in marine life and richness in biodiversity, the territory has a self-sustaining marine environment primarily due to the interaction between two oceanic forces: The Benguela and Agulhas.

Kavita reports that the cold, nutrient rich Benguela current is the driving force of fishing effort at the west coast of South Africa. Originating from the deep waters of the ocean, the current reaches the surface through a natural phenomenon called upwelling. Upwelling occurs when winds blow surface waters away from the land, thus creating a vacuum. Waters from the deeper parts of the ocean then move in to replace the missing volume of water. This deep water is rich in nitrogen phosphorous, and other plant nutrients, which is used by phytoplanton as they develop. Phytoplanton feeds the plant eating fish, which inturn feeds the flesh-eating fish, explaining the abundance and high productivity of marine resources on the West Coast.

The Agulhas, on the East Coast, is a warm current with a relatively shallow continental shelf that provides a good breeding area for many species of fish. Their eggs are layed in the Agulhas bank while the current transports the eggs and larvae to the Benguela system where they feed and grow. Thus the role of the Agulhas east coast current is to restock

the Benguela west coast. Thereby creating an interactive natural self-sustaining eco-environment.

3.4 Marine Sectors

According to Hersoug (1998) the marine industry of South Africa consists of 19 different fisheries, mainly concentrated on five of the most important types:

1. Demersal Fishery

Economically, demersal fishery is the most important fishery branch, dominated by deep-sea trawling for Cape hakes which constitutes on average about 70 per cent of landings. The wholesale value of its processed products, from a catch of 177 000 tons was estimated at R 924 million in 1997 (S.A. Yearbook, 1998).

Martin & Nielsen (1998) reports that the demersal fishery employs approximately 8 600 people of which 2 850 are sea-going.

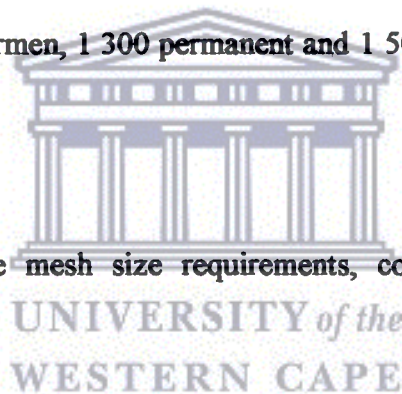
According to Kavita (2000) management strategies include total allowable catches (TAC's), specification of gear, company quotas for hake, and prohibition of operating on special days and in inshore areas.

2. Pelagic Purse-seine Fishery

The pelagic fishery is South Africa's largest sector in terms of volume landed. According to the S.A. Yearbook (1998), in 1997 the anchovy catch was 60 000 tons, with the total catches of pilchard 89 000 tons directed catch, and 27 000 tons by-catch. Anchovy and pilchard are mainly processed into fishmeal, fish body oil and canned fish, collectively valued at approximately R 403 million, contributing about 25% to the total value of South African fisheries.

The sector employs 700 fishermen, 1 300 permanent and 1 500 seasonal workers (Martin & Nielsen, 1998).

Regulatory measures include mesh size requirements, company quotas, and TAC's (Kavita, 2000).



3. Line Fishery

The S.A. Yearbook (1998) reports that the line-fishing species include snoek, cod, silverfish, geelbeck, yellowtail and hottentot valued at R 262 million.

According to Martin & Nielsen (1998) and Hersoug (1998) the line fisheries consist of a variety of different operations; 552 boats employing about 2 600 fishermen, 459 vessels

employing approximately 3 800 people at sea, and 1 000 ashore operating the squid-jigging sector.

A United Nations, Food and Agriculture Organization Report (FAO, 2001) writes that the sector is managed by minimum size limits, bag limits, closed seasons and closed areas.

4. Rock-lobster Fishery

The rock-lobster fishery is the third most important fishery, of which 75% of the annual catch is exported. Its estimated value is at R 165 million for the 1996/97 season, approximately 12% of the total value of all fish landings (Martin & Nielsen, 1998 & S.A. Yearbook, 1998).

According to Hersoug (1998) the West Coast fishery operates inshore with some 1 249 crafts, mainly dinghies or other types of open boats. The South Coast fishery is heavily concentrated commanding 14 large vessels. The rock-lobster industry employs 4 800 people in the peak season (Martin & Nielsen, 1998).


The fishery is controlled by company quotas, which are allocated for a subdivided geographical area. The entire industry is regulated through TAC's, closed season, and minimum size requirements (Kavita, 2000).

5. Abalone Fishery

The abalone fishery is mostly canned or frozen and exported to the Far East, with legislation stipulating a 10% domestic market sell (Martin & Nielsen, 1998). Registered divers, who by law are compelled to deliver their catch to registered companies, catch the abalone. The industry employs about 300 people.

The FAO (2001) report stipulates that the fishery is managed through TAC's within seven zoned off areas using closed seasons, a minimum legal size limit and permit requirements.

3.5 Economic Value of Marine Resources



The South African Yearbook (1998) reports that the wholesale value of the marine industry has been estimated at R 2.5 billion, harvesting a total of approximately 580 000 tons of fish in live weight, shell-fish and seaweed, with more than 90% of the catch taken from the productive cold waters off the West Coast.

3.6 Economic Role of the Marine Industry

The estimated value of direct benefits obtained from coastal goods and services is about R168 billion annually, which is equivalent to about 35% of the annual Gross Domestic Product. Indirect benefits, for example, ecosystem services like erosion control and

waste treatment, are worth a further R134 billion annually (White Paper for Sustainable Coastal Development.2000). The Western Cape is the center of the industrial fisheries and in areas such as Saldanha Bay and St. Helena Bay, the dominant employer. Other major centres where marine-related employment and income generation is important includes Cape Town, Mosselbay and Port Elizabeth (Hersoug.1998).

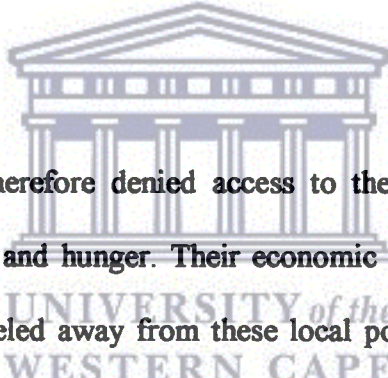
3.7 The Historical Background to the Need for Change

Reflecting on how the marine sector developed into such a prosperous billion-rand industry, the study takes account of historical developments that incurs the moral need for restructuring this industrial sector towards a social responsibility pact.

As a result of the past Apartheid Government and its discriminatory practices, the rights to marine resources were concentrated solely in the hands of 'white-owned' commercial enterprises. The local fishing communities, mostly 'non-white', were completely ignored by legislation and government. Under these apartheid policies communities were segregated geographically, politically and socially. Resource utilization patterns were designed to favor the 'white' section of the population, who for the most parts monopolized access and ownership rights of the marine resources. This has left a legality of skewed community development.

Disadvantaged communities had little or no direct access to the main resources in the South African fisheries. In Hersoug (1998), the total South African quota in the early

1990's amounted to 512 437 tons within the eight species regulated by the Total Allowable Catch (TAC) quotas. Of these quotas, 0.75 % were awarded to disadvantaged groups. Of the 2 700 registered commercial fishing boats in South Africa, 7% are owned by local operators, while of the 4 000 fishing licenses issued, approximately 6% were issued to local fishers. The same imbalance applies to the quota allocation between the established commercial companies and the small-scale fishing sector. Of a total quota of 512 437 tons, 7% was awarded to the small business sector, while the rest was allocated to the established commercial sector. Thus most of the commercial sector companies, established in the apartheid era, were responsible for about 70% of the total turnover in the fishing industry.

The logo of the University of the Western Cape, featuring a classical building with columns and a pediment, with the text 'UNIVERSITY of the WESTERN CAPE' below it.

Coastal communities were therefore denied access to the resources that would have helped alleviate both poverty and hunger. Their economic needs were dismissed as the benefits of fishing were funneled away from these local populations to the commercial sector. This was the entrenched political economy and social organization, nurtured by 300 years of mainly 'white' South African political history that has set down the resource-use patterns and access right regime that governed resource management in South Africa.

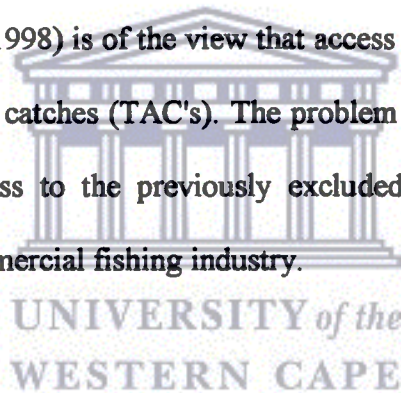
The challenge the South African government face in the need for change post-apartheid, would be a general realignment of the institutional economic structures and practice of the marine industry towards community development enterprises, within the constraints of natural resource sustainability.

The research therefore proceed to investigate the economic profile of the commercial and local subsistence fisheries sectors to measure the viability of this general realignment of marine industry practice towards a social responsibility pact of community development.

3.8 Challenges of Realigning the Economic Institutional Structures and Practice

3.8.1 The Commercial Sector

Given that the sustainability of the marine industry is an accepted non-negotiable principle, Martin & Nielsen (1998) is of the view that access cannot be granted by simply increasing the total allowable catches (TAC's). The problem formulated by the writers is therefore how to grant access to the previously excluded fishers without negatively affecting the established commercial fishing industry.



Hersoug (1998) affirms the view that the South African fishing industry is relatively small, concentrated both in terms of ownership and geographic location. The marine companies that developed over the past 50-100 years possess modern equipment both in catching and processing, and have evolved into multinational giants with an enormous amount of wealth and economic power. This sector's economic efficiency produces a considerable amount of surplus for the operators involved as they compete successfully on the most advanced foreign markets. It is therefore argued that most available resources are already fully utilized. Consequently few possibilities exist where new entrants can be accommodated, be they local fishermen formerly deprived of existing rights, or new

entrepreneurs in general who would like to participate in the industrial and semi-industrial fisheries.

Assessing the commercial sector's domestic market, a United Nations Trade and Development Analysis Report in partnership with the World Trade Organization (UNCTAD/WTO) 1999's demand-supply survey report reveals, that during 1996 South Africa consumed a total of 414 234 tons of fish and fish products with a wholesale value of R 1.7 billion. Of this, 73 071 tons were canned fish, 110 667 tons were fresh fish and 232 496 tons were fishmeal. During the same year, South Africans consumed 2,63 kg per capita of canned fish with an overall consumption of fish and fish product of 4.37 kg per capita. It is the opinion of the report that this consumption trend is a relatively low figure for a fish-producing nation, comparative to other countries.

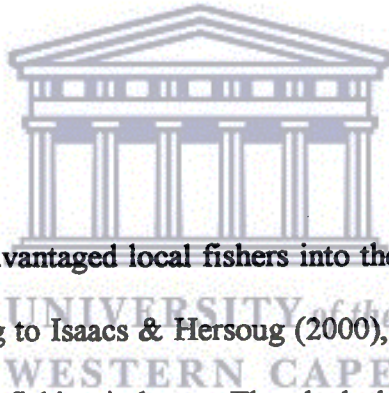
The commercial's sector's export market is an important earner of foreign exchange for South Africa, as the UNCTAD/WTO (1999) report indicates that export of fish and fish products totaled R 1.3 billion. These exports have shown consistently strong growth over the past years, increasing by 16% in 1997 and 40% in 1998.

It is the view of the UNCTAD/WTO (1999) report that the main reason for the low consumption trends in South Africa is the industry's export driven market niche. The export market has always been driven by a high consumer market value in comparison to a low consumer domestic market. This scenario affirms a typical Third World dilemma of poverty that limits economic expansion, comparative to First World consumerism. For

this reason marine life consumption is predominantly the domain of the middle and upper income groups in South Africa. As a consequence, industry sources are not optimistic on the rise of marine resources demand on the domestic front.

Kavita (2000) states that this economic position and influence of the marine commercial sector can be effectively utilized developmentally, to dictate the pace of transformation and effect government policy towards industrial restructuring, as they have the knowledge and infrastructure to manage the resources and business that provide significant earnings.

3.8.2 The Local Fishers



The entry of previously disadvantaged local fishers into the commercial sector of South Africa looks dismal according to Isaacs & Hersoug (2000), as they often possess limited knowledge of the commercial fishing industry. They lack the skills in economic planning and organizing operations, and have limited or no knowledge of the economic intricacies of managing a competitive fishing business. Sowman (1998) state that this is a result of fishers engaging in fishing not by choice but as a means of subsistence.

This perception is supported by Lemay & Lestrade (Cape Argus: 14th /10/01), who argues that for local fishers, fishing implies a livelihood. The art of survival from sea has been inherited from their great-grandfathers, who just as they, have always been fishermen, carving most of their subsistence from fishing.

Hutton & Lamberth (1998) testify that this sector subsequently holds a threat to the sustainability of the fishery resources. One of the most important issues which needs to be addressed is the differing degrees of knowledge regarding aspects such as biology, conservation and the understanding of the fishery as a whole. Findings from the writers' interviews with local fishers suggest that they do not understand the reasons for size restrictions and bag limits. Fishers also admitted not knowing how productive the resources are. They normally have acquired a local knowledge of fishery in terms of knowing which fish will bite and where, depending on the season and local oceanographic conditions, but do not necessarily know the scientific explanation for this.

Kavita (2000) affirms that many local fishers do not have faith in scientists and believe only what they know and what they see in the ocean. Many fishers believe that over-fishing is a myth, and that what is happening to marine resources is part of a natural cycle. They think that once abalone run out, they will simply begin exploiting rock lobster and once that runs out move to snoek etc. The writer explains that many of these fishers unfortunately fail to understand that marine resources are not inexhaustible and there is a limit to exploitation.

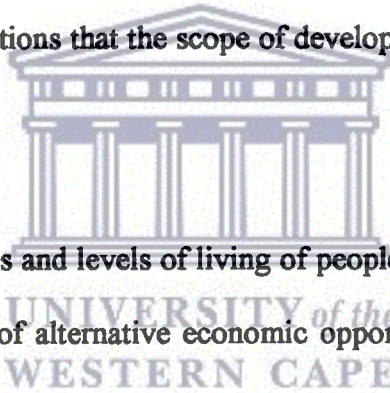
3.8.3 The Empowerment of Subsistence Fishers

Loayza & Sprague (1992) suggest that the successful development of local fishing communities is an opportunity of uplifting often the poorest in our society. The organizational, technical, marketing, managerial and political aspects of developing these

local fishers demand a well-thought out strategy based on the fundamental need to integrate the individual, family and community into the larger economy.

The writers support an efficient local marketing strategy that supply local demand, as failure to develop and service low cost local markets limits the development of local fishers. The reason being that low domestic demand coupled with large economies of scale, means that the most efficient industry will consist of a relatively few large firms, as evident in the South African fishing industry.

Christy & Francis (1991) mentions that the scope of development in fishing communities should include:

- 
- Efforts to improve incomes and levels of living of people in fishing communities that involve the development of alternative economic opportunities, helping in reducing overcapitalization in the fishery.
 - An integrated social development plan that includes improved access to basic social services and education opportunities.

Isaacs & Hersoug (2000) propose a community development strategy which include an organizational arrangement that could open opportunities for local entrepreneurs to stimulate and develop the local economy in their community:

- The development of *human capital*, which represents the skills, knowledge and ability for an individual to act in new ways.
- The access to *financial capital*, to finance the objectives of the entrepreneur.
- Access to *social capital*, on which individuals can draw in pursuit of entrepreneurship.
- Access to *political capital*, to influence policy formulation processes and realize outcomes that are in the entrepreneur's perceived interest.

Friedel (2000) writes that tourism could play a large role in the future of South Africa's local fishing industry development. Recreational fishing is so popular that annual investment therein is almost exceeding the annual wholesale value of all the country's marine resources. A coastal economy based on tourism, with its restaurants, hotels, and resorts, would ensure a steady demand for fresh fish caught by local fishers.

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According to a World Bank Report (1996) there is the potential for sustainable development wherein business, community and government are involved as equal partners, with complimentary responsibilities utilizing the strengths of each partner through Public-Private Partnerships. This partnership is normally used in managing institutional change towards development. The report define each partner's strengths as the following:

- Private Sector
 - Results Orientated.

- Ability to mobilize international practices.
 - Utilize local business operations.
 - Access to resources: human resources, financial and technical.
 - Organizational skills: organizing, managing and delivering.
- Government
- Regulatory ability.
 - Institutional funding.
 - Macro view of the country and industry.
- Community
- Ability to mobilize social capital.
 - Understanding community and local issues.
 - Program support and implementation capacity.



In realigning the economic institutional structures and practice of the marine industry in South Africa, the World Bank's interpretation of Public-Private Partnerships develops the resource distribution mechanism of achieving the developmental needs of the marine industry and the local subsistence fisher communities. The strength of this empowerment initiative resulting from the Public-Private Partnership, is when the private sector creates and funds a community development organization that facilitate community development projects, by utilizing the social capital of the community and the enabling regulatory ability of government.

3.9 The Policy Context of PPP's in the South African Marine Industry

The policy context of marine management in South Africa is assessed through a comparative analysis between two relevant policy papers:

1. White Paper for Sustainable Coastal Development in South Africa (2000).⁸
2. The "Sustainable Coastal Livelihood Study" (2002), commissioned by the Department of Environmental Affairs and Tourism.⁹

While the 'White Paper' outlines the policy guidelines on coastal management, which formulates the parameter within which marine management in South Africa operates, the 'Study' measures the implementation needs of the policy. By comparing the two policy papers, the research would be able to assess the measure of legitimacy, Public-Private Partnerships has within the policy context of marine management in South Africa.

Public-Private Partnerships is formulated in the 'White Paper' as a cooperative style of governance with different stakeholders co-managing the natural resources of the country. This approach seeks to build partnerships between government, the private sector and civil society in taking co-responsibility for marine and coastal management. Within this partnership government would play the lead agent in creating this participatory environment for Public-Private Partnerships to develop, by empowering stakeholders to participate effectively.

⁸ Reference to this policy paper is indicated by the 'White Paper' in the comparative analysis discussion.

⁹ Reference to this paper is indicated by 'The Study' in the comparative analysis discussion.

The 'Study' measures the implementation possibilities of PPP's in the marine sector by highlighting that the policy guideline for participation between interested and affected parties need substantial investment of financial, technical and empowerment support in sustaining this initiative. The 'Study' supports the 'White Paper', that the co-management of multi-stakeholder partnership would ensure the equitable resource distribution between partners, and that it would also self-sustain the Public-Private Partnership.

In developing this equitable institutional environment, the 'White Paper' suggests that the institutional design of Public-Private Partnerships would need to promote dialogue, cooperation and a collaborative problem-solving approach within a consensus-building institutional framework.

The 'Study' informs that the development of this kind of PPP institution would require a long-term investment in ensuring an effective partnership involving poor people engaging government and the private sector in improving their long-term livelihood prospects. This would therefore need to include an industrial sector approach in enhancing the ability of previously disadvantaged communities in the industry, to be directly involved in participating within the PPP institutional environment. Consequently different institutional interventions would need to be tested in an "experimental" manner, informed by local circumstances, stakeholder needs and interests. Developing this deliberate institutional learning environment in PPP's, informed by ongoing monitoring and evaluation, would overcome institutional obstacles and unlock opportunities to promote sustainable coastal livelihoods.

The 'White Paper' affirms the view that Public-Private Partnerships would stimulate opportunities that increases local job prospects through linking informal and subsistence fishing with the commercial sector in the same industry. This would transfer industry knowledge and skill development to local coastal communities, by retaining the local economic benefits through local fish farming and processing of products to the local market sector. The paper emphasizes that part of its empowerment attention is also to reduce reliance on the consumption of natural resources by diversifying local coastal economic activity.

The 'Study' recommends that to expand livelihood options, especially those that reduce reliance on the natural capital of the coast, the governance of PPP institutions should be aligned with the sustainable livelihood approach, by enabling poor people to meet their basic needs and improve their livelihood prospects in practice. The 'Study' proposes that PPP institutions develop an industrial sector orientated social development policy plan that would sustain alleviating poverty in coastal areas.

3.10 Summary

The case study analysis of the South African marine industry revealed that the local domestic market is underdeveloped, due to the profit-seeking export driven market of the industry discriminating against the purchasing power of the majority lower income population of the country. Recommendations were made that the local fishing sector should be incorporated into the larger economy to supply this market niche, but should

not lure a 'gold-rush' scenario in the industry. This could be done by balancing empowerment strategies with integrated social development programs that would widen local employment opportunities in other sectors of the economy.

In creating this environment, the well-established private sector has its role cut out in keeping the industry economically viable by acting as alternative development activators, through Public-Private Partnerships. This is achievable by establishing community development organizations in local fishing communities. These organizations would facilitate the development of alternative employment opportunities, which enhances and widens the distribution of basic life sustaining goods in the community. This empowerment strategy combines public-industrial policy, with a business-community organizational partnership that would stimulate local economic development.

The final analysis in the case study of the South African marine industry revealed that its evolutionary development is compatible to the evolutionary phases of development practice, and its applicability to marine industry development. This formulates the insight that the South African marine industry is at the preparatory stage for the institutionalization of participatory co-management, evident of its policy framework for resource management. The development model of participatory co-management establishes the need to create a broader environment for equitable economic participation that reaps its benefits in the social development of local fishing communities. This would mean the development of new institutional arrangements between social, economic and political actors and stakeholders. A concept that formulates the premise of a Public-

Private Partnership paradigm. How this paradigm will be operationally instituted within the Directorate: Integrated Coastal Management and Development will be the focus of the research study's next chapter.



CHAPTER 4

FINDINGS AND RECOMMENDATIONS

4.1 Introduction

The aim of the chapter is twofold. Firstly, it presents the main findings of the study. Secondly, it proposes recommendations for institutionalizing Public-Private co-management partnerships.

4.2 Findings¹⁰

The analysis of the study identified the following costs that need to be considered when institutionalizing Public-Private Partnerships:

□ Public-Private Institutionalization

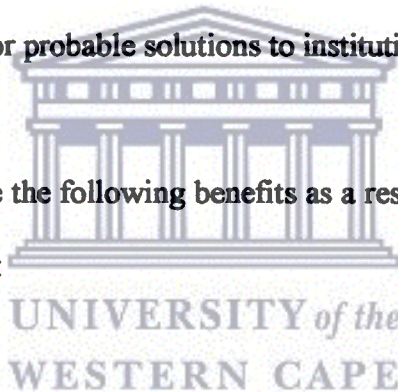
- Create a national Public-Private co-management institution that facilitates the identification, mobilization, organization and participation of all stakeholders in the marine industry.¹¹

¹⁰ In support of the following findings, the reader is referred to works of authors cross-referenced in this research paper. The reader will note in the supporting footnotes 11-20 the author's name and page number will appear indicating the arguments supporting the particular finding.

¹¹ See: 1. Hyden p.22
2. Hersoug & Ranes p.23

- Develop a learning co-management institutional culture that is horizontally accessible and structured to facilitate the stimulation of local creativity in decision-making processes.¹²
- Facilitate the creation of co-management institutional structures that involve collaborative reflection through feedback, exchange of information, questioning, and formulating institutional values in terms of how they affect the institution's goals and objectives.¹³
- Develop conflict management mechanisms within the Public-Private co-management institutional arrangement as diverse information need to be creatively facilitated for probable solutions to institutional problems.¹⁴

These invested costs will have the following benefits as a result of the institutionalization of Public-Private Partnerships:



□ Public-Private Partnership Outcomes

-
3. Pomeroy & Williams p.24 / 25
 4. Hara p.24
 5. Isaacs p.25

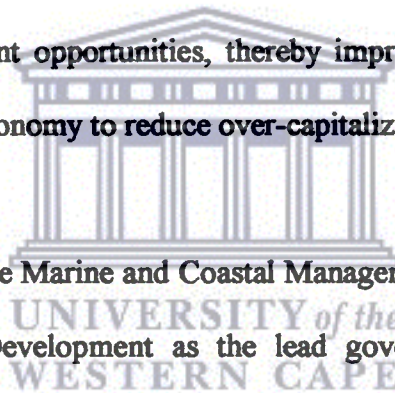
- ¹² See:
1. Hartzius p.35
 2. Agrawal & Gibson p.35
 3. Lemare p.35 / 36
 4. Dobell p.36

- ¹³ See:
1. Bernand & Armstrong p.33
 2. Brown p.36
 3. Borrini-Feyerabend p.38 / 39

- ¹⁴ See:
1. Owen p.34
 2. Bennet p.40
 3. Borrini-Feyerabend p.40 / 41

- Incorporate the local fishing communities in partnership with the commercial sector into larger scale economic organization.¹⁵
- Incorporate the recreational fishing sector into the local fishing economy.¹⁶
- Redistribute ownership between large industrial owners and local non-owners through institutional twinning, collaboration and partnership.¹⁷
- Establish public-private partnerships for community development between the established private sector and local fishing communities to expand the distribution of basic life-sustaining goods and services.¹⁸
- Develop integrated community development strategies that would stimulate alternative employment opportunities, thereby improving outward mobility into other sectors of the economy to reduce over-capitalization in the fishery.¹⁹

The research has identified the Marine and Coastal Management's Directorate: Integrated Coastal Management and Development as the lead government agency that would



¹⁵ See: 1. Platteau p.5
 2. Isaacs p.5
 3. Jenoff & Mc Cay p.6
 4. Loyza & Sprague p.55
 5. The 'White Paper' p.60

¹⁶ See Friedel p.56

¹⁷ See: 1. Harrison & Naidoo p.26
 2. Todaro p.28
 3. Johnson p.34
 4. Vink p.34

¹⁸ See: 1. Brandshaw & Blakeley p.26
 2. Colclough & Manor p.27
 3. World Bank p.56 / 57 / 58
 4. The 'Study' p.60

¹⁹ See: 1. Christy & Francis p.55
 2. Isaacs & Hersoug p.56

develop the Public-Private participatory co-management system.²⁰ The recommendations reduced from the research findings will be used to design its institutional model that would restructure the benefits of the marine industry towards sustainable development. The projected institutional outcome is an economically viable marine industry that is competitive on the global market and socially responsive to human security.

4.3 RECOMMENDATIONS

4.3.1 Recommendation A:²¹

**The Strategic Framework of the Marine and Coastal Management Directorate:
Integrated Coastal Management and Development**



Purpose

To facilitate marine resource institutional economics towards community development enterprises.

Functions

- Facilitate Cooperative Governance and Partnerships
- Manage Sustainable Coastal Industry Development
- Regulate Conservation, Ecosystem Health and Biodiversity

²⁰ See literature review on p.9/10

□ **Manage and Develop Local Subsistence Fisheries**

Vision

The economically viable and equitable utilization of the marine resource value to the economics of social creativity and community development.

Mission

To contribute in reducing poverty and instability associated with resource management, by ushering in a new era of public-private partnerships and cooperation in South African fisheries. This co-management agenda will spawn a positive marine management culture through sharing responsibilities and decision-making with industry, and making resource users accountable for the decisions they make.

Objectives

Through the institutional arrangement with stakeholders, the political effort will be to work towards an increasingly self-reliant, more effective and efficient marine management regime in South Africa.

Goals

To achieve the strategic goals envisaged, it becomes imperative to develop an integrated marine decision-making mechanism that would set the stage for co-management arrangements by ensuring transparency, accountability, and ensuring that clients and

²¹ Recommendation A is deemed necessary as the Directorate has not been institutionally structured on a national level at the time of the research, and therefore needs a strategic framework to structure its

stakeholders are consulted on the overall goals and strategies for the management of each fishery.

Principles

- Have a long-term focus that seeks to preserve and enhance economic, social and natural capital in order to sustain aquatic species and to improve the quality of people's lives and ensure continuing benefits for future generations.
- Integrate and share information and data to enhance cost-effective decisions based on participation and prevention of problems, through conducting regular assessment of policies, plans and programs.
- Define a reporting framework that is committed to and supportive of consultative and transparent operations and decision-making.
- Accept shared responsibility and commit to transparency and communication of how and why decisions were made.
- Develop a management system to review performance against commitments at regular intervals, and thereby to document progress and the need to correct action as necessary, to ensure continuous improvement.

operations.

4.3.2 Recommendation B:²²

Preparing for Public-Private Cooperative Governance

Institutional Culture

In the process of preparing for the co-management partnership between public-private actors, an enabling institutional environment would need to be established. This would entail an institutional design that coordinates a collective identity between institutional actors to a compatible core value system. Building towards this sense of community between institutional actors requires a facilitation of multilingualism and multiculturalism, which links the actors to shared interest in predicting and managing change in the public-private co-management partnership. This enabling environment creates an institutional knowledge community that shares its individual organization expertise with an institutional community of organizational actors in interest of its institutional membership.

Building Trust between Partners

The development of mutual trust between culturally diverse organizations within the institutional structure needs to highlight the interdependence of the partnership for the concerns of development purposes, within the institutional design of the Public-Private Partnership. As fear and suspicion is a common denominator among institutional actors, it would be important to establish a transparent and efficient institutional communication

²² Recommendation B sets out the conducive environment and identifies aspects that need to be considered when preparing for the multilateral governance of Public-Private Partnerships in the South African marine

mechanism that would be able to coordinate shared knowledge perceptions in respect to shared meanings and understandings tied to conflict management and resolution. Institutional conflict management is in the creation of institutional learning and knowledge management in identifying difference of opinion and finding common ground in interpreting phenomena, thereby establishing a forum of consensus and mutual understanding. Trust building is further enhanced through the monitoring and evaluation of institutional policy outcomes, within a proactive critical environment. This environment develops the institutional partnership into a continuous learning organization that builds mutual support and confidence in accommodating negative as well as positive criticism within the institutional design.

Identifying Institutional Actors

The Directorate will coordinate the identification, mobilization and organization of the different stakeholders in the marine industry into a national marine co-management council that is representative of all stakeholders in the industry:

- i. Regulatory Agencies; Marine & Coastal Management, Government, Police and Trade Unions.
- ii. Resource Users; Commercial Fishing Companies, Local Fishers, Fishing Communities, Traders, Business Suppliers and Consumer Interest Groups.
- iii. Community Development Agencies; Non Government Organizations (NGO's) and Community-Based Organizations (CBOs).

industry.

Identification of Representatives

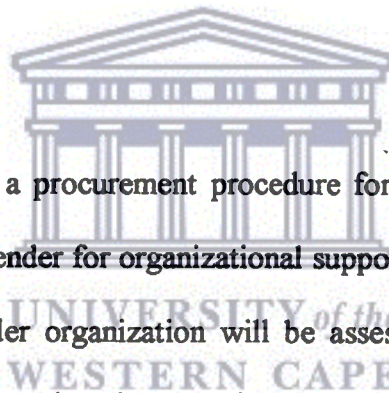
Each identified stakeholder group will organize to elect a representative delegation to the national marine co-management council.

Democratic Governance

Each delegation to the national marine co-management council will need to operate under democratic principles, to ensure that potential co-management partners have common ground under transparent governance practices that represent, negotiate and act on behalf of representative mandates.

Organizational Support

The Directorate will develop a procurement procedure for organizational development consultancy organizations to tender for organizational support to the different stakeholder organizations. Each stakeholder organization will be assessed to evaluate the support needed to integrate the group members into a national organization.



4.3.3 Recommendation C:²³

Structuring the Public-Private Institutional Arrangement

Negotiating the Management Arrangement

- The first meeting of delegates will be to structure the rules and procedures of the co-management council, and elect a secretariat.
- Each stakeholder delegation will present:
 - Their current reality.
 - Their sectoral vision of interest.
 - Their vision for the co-management council.
- The co-management council will integratively formulate a common institutional vision based on the consensus vote of all stakeholders.
- The co-management council will formulate an institutional grand strategy towards the common vision.
- The grand strategy will be divided into operational components.
- The co-management council will negotiate detailed plans and agreements for every component of the institutional strategy by clarifying:
 - What will be done

²³ Recommendation C sets out the institutional design that would manage the Public-Private multilateral administrative processes.

- By whom
- With what means
- Rights and responsibilities among stakeholders
- Conflict Resolution Processes

- The institutional actors will identify expected outcomes within projected time frames to be accomplished, as well as measuring indicators and procedures to monitor and evaluate progress.
- The co-management council will establish component committees that would coordinate strategic projects, accountable to the co-management council secretariat.
- The co-management council secretariat will publish the institutional rules and procedure, its vision and strategy, and the agreed plans and agreements that have been collectively produced by the co-management council.

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Institutional Communication System

The Co-management Council Secretariat

- This organ will have the knowledge and understanding of the co-management plans, agreements, rules and stakeholder organizations:

Co-management objectives and schedule of events;

Co-management entitlements and responsibilities assigned to each concerned institutional actor.

- Will be the central information and knowledge management unit of the Directorate.
- Will facilitate non-discriminative access to communication and negotiation platforms.
- Will act as facilitator to assist during meetings, mediate conflict, and help institutional actors to communicate among themselves.
- Will manage the active participation of the institutional actors in the preparation of co-management plans and agreements, by ensuring:
 - The presence of all delegates at meetings.
 - Support for effective expression and defense of respective interests and concerns.
 - Empower delegates to take responsibility and be accountable.
- Act as linkages between institutional actors.
- Monitor adherence and compliance to agreed co-management entitlements and responsibilities.
- Monitor organizational satisfaction with institutional co-management plans, agreements and inter-organizational relationships.
- Mediate in the event of conflict among institutional actors during implementation of plans and agreements.

Institutional Monitoring and Evaluation

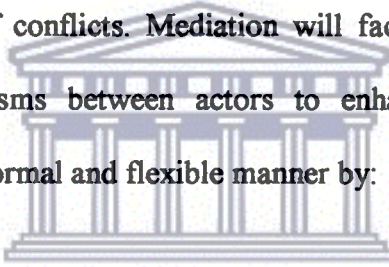
Program Review Meetings

- The co-management council review meetings will allow for regular critical discussion on the implementation of plans and agreements. These meetings will enable the identification of institutional and organizational problems, and promote creative and innovative solutions.
- Each co-management component committee will develop measurement indicators that will be used to evaluate and assess component implementation outcomes.
- Assessment data will be collected, assimilated and made accessible to the co-management council for purposes of developing a learning institution.
- Evaluation should be done institutionally, to assess the institution's collective capacity to deliver on plans, and organizationally, to assess the capacity of individual organizations within the co-management system to implement programs.
- At review meetings each delegation should be able to assess whether the co-management plans and agreements succeeded in progressing towards their individual objectives, as well as the agreed common vision. Suggestions on improvement should be encouraged to enhance progress, as the central motivation would be to learn from implementation on the ground.
- On basis of these review-meeting discussions, the institutional actors decide whether the co-management plans and agreements have to be modified, and if so, what modifications are needed and who should carry them out.

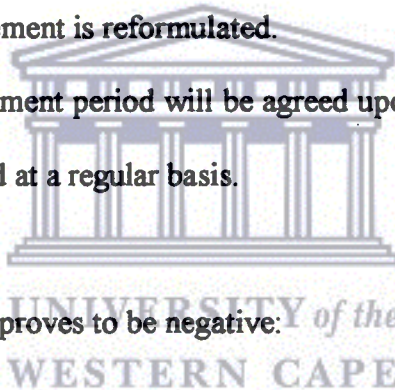
Institutional Conflict Resolution

In the course of implementing activities, diverging interpretations of the co-management plans and agreements may surface, therefore a proactive conflict resolution system need to be in-place having the following guidelines:

- Stakeholders should register disagreements with the co-management council secretariat. The secretariat having knowledge of entitlements, responsibilities and agreements across various stakeholders will be able to competently assist in mediating in the event of conflicts. Mediation will facilitate creative participatory problem-solving mechanisms between actors to enhance stakeholder ability to manage relations in an informal and flexible manner by:

- 
- Identifying and involving the institutional actors concerned.
 - Reaching a common area of interest and point of conflict (different values, interests, and needs of various actors involved).
 - Creating a forum for negotiation and some basic rules providing a framework for the actors concerned to meet and discuss issues together.
 - Identifying the points of conflict.
 - Highlighting various options for actions generated by the actors concerned as discussed among them.
 - Producing a written agreement on one of these options.

- Legitimizing the agreement by all relevant stakeholders.
 - Developing an implementation plan and outcome measurement of the agreement.
- If the outcome measurement of the agreement is unsatisfactory:
- Actors will be brought together to discuss the problems of implementing the agreement.
 - The agreement will be revised.
 - The agreement is reformulated.
 - An assessment period will be agreed upon where compliance will be monitored at a regular basis.
- If the assessment outcome proves to be negative:
- Arbitration before an elected tribunal will be constituted, using formal law as guiding principles to remedy the situation.
- Results of the co-management review meetings should be used as progressive assessment to predict potential conflict scenarios, and prevent them from occurring in the future.



Institutional Roles and Responsibilities

□ Marine and Coastal Management

The Directorate: Integrated Coastal Management and Development will be responsible for the coordination of the:

- Co-management Institutional Development and Coordination
- Co-management Institutional Monitoring and Evaluation
- Marine Industry Regulation and Enforcement

□ Marine Research

The Marine Research is organized nationally with international scientific research exchange partnerships, responsible for the coordination of:

- National Scientific Research Organization, Management and Development
- Conservation, Ecosystem Health and Biodiversity Research
- Fish Product Development and Research
- Fishing Effort Engineering, Research and Design

□ **Marine Commercial Sector**

The Marine Commercial Sector will be responsible for the coordination of:

- **National Industrial Organization, Management and Development**
- **Specie-specific Exploitation**
- **Industrial Infrastructure Development and Planning**
- **Industrial Product Demand and Supply**

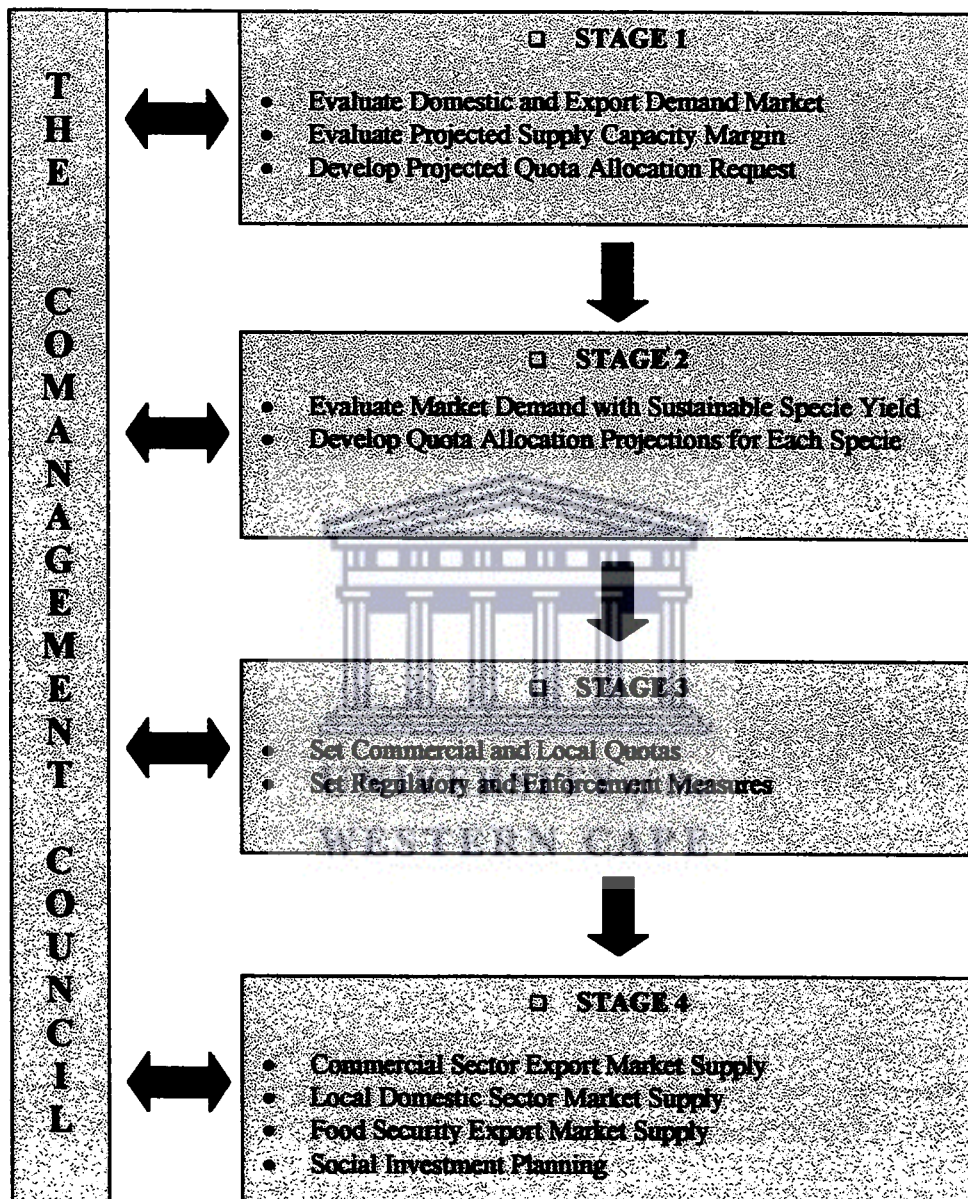
□ **Social Investment**

A Co-management Social Investment Unit will be responsible for the coordination of:

- **Local Fishing Community Development and Planning**



The Sustainable Resource Management Model²⁴



²⁴ This model illustrates how the different stakeholders in their roles and responsibilities would interact within the co-management council. Its interrelations are mathematically formulated to obtain maximum harmonious rationality.

Stage 1: Marine Industry Planning

What will be the maximum resource yield (MRY) to supply the maximum economic yield (MEY) of the market?

$$MRY > < MEY$$

The Marine Commercial Sector, in consultation with the co-management council, will evaluate the marine market and food security demand, and the supply capacity of the industry. It supplies Marine Research with estimated specie-quota allocation demands.

Stage 2: Sustainable Marine Eco-system Management

What will be the maximum sustainable resource yield (MSRY) that would supply the dividends between the maximum resource yield (MRY) and the maximum economic yield (MEY) of the market?

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$$(MRY + MEY)$$

$$MSRY$$

The Marine Research, in consultation with the co-management council, will evaluate the commercial sector quota demand with the sustainable marine specie yield. It supplies the Directorate: Integrated Coastal Management and Development with the sustainable specie-quota allocations.

Stage 3: Sustainable Eco-industrial Management

The result of Stage 2 formulates the maximum sustainable economic yield (MSEY) to supply the market.

$$\text{MSEY} = \frac{(\text{MRY} + \text{MEY})}{\text{MSRY}}$$

The Directorate: Integrated Coastal Management and Development, in consultation with the co-management council, distribute commercial and food security specie-quota allocations to the commercial sector. It formulates and coordinates regulatory and enforcement measures.



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Stage 4: Sustainable Marine Industry Management

The maximum sustainable economic yield (MSEY) supplies the maximum sustainable development (MSD) of the market, industry and society dependent on the resource.

$$\text{MSEY} = \text{MSD}$$

The Marine Commercial Sector, in consultation with the co-management council, based on the annual economic performance of the industry, will decide on an industrial sector profit margin for investment in the administration, management and development of the industry, and its social investment capital into local fishing community development.

4.3.4 Recommendation D:

Institutional Outcomes

The following recommendations describes projected outcomes that would need to be considered within the co-management council, taking into consideration the developmental context and purpose of the Public-Private Partnerships.

Local Fishing Capacity Building

Within the co-management council chambers, the commercial and local fishing sectors will need to negotiate and enter into cooperation agreements that would ratify economic viable operations which include the following industrial co-operations:

- An institutional cooperative agreement between the commercial and local fishing sectors to assist each other as developmental partners over an agreed time-frame period through an institutional twinning project agreement. Collaborations would consist of developing the economic viability of the local fishing industry by outsourcing domestic operations to local fishers, to stimulate the demand for fish produce on the local market. The original commercial company would still maintain some minority ownership in the venture, and would have the opportunity to negotiate mutually beneficial arrangements with regard to buying, processing and marketing the catch. Access rights and corresponding quotas formerly belonging to the original

commercial company would then gradually be transferred to local fishing operations. Partnership agreements would include infrastructure and equipment support, personnel training and exchange programs, long-term consultancy and advice services.

As a development of the local sector's export potential, local fishers, through the capacity of the commercial sector's export infrastructure and expertise develops regional and international export markets for the low-income food security market, as low purchasing international countries offer potential market export opportunities.

Within this cooperative developmental venture agreement period the commercial sector would exclusively maintain and expand their high-income international export market, while the developing local fishing industry concentrate on local and international food security markets.

A negotiated redistribution agreement within a co-management framework between large industrial ownership and local non-owners would stimulate local economic opportunities within the industry. This would increase local customer choice, and localize production for local markets. The outcome would be a desirable long-term stabilizing perspective on industrial policy, as more industrial knowledge is transferred to local fishers creating industrial equity and economic development.

- The development of local fishing tourist villages in fishing communities that build an infrastructure for the recreational fishing sector to be incorporated into the local fishing economy. Local fishing communities acts as recreational fishing quota monitoring officers, and facilitates the development of the local and international recreational fishing industry.

Recreational fishing, by paying a resource rent to fish and to hire fishing equipment can develop the local economic development of fishing communities. A community industry can be developed that attract local and international tourists to visit and invest in local fishing communities. Apart from developing a local seafood catering industry which cater for locally caught fish, fishing schools can be established that educate tourists and the local public on traditional and modern fishing techniques and equipment, and the value of conservation of fishing stocks.

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The recreational fishers would purchase fishing quotas at Marine and Coastal Management, who would then supply information regarding coastal fishing routes that would link them to local fishing tourist villages. Facilities in the tourist villages would cater for the tourists and the general public to mingle with local fishing community residents while they prepare and cook the day's catch within the coastal scenic environment of the fishing tourist village. Developing local arts and culture exhibitions and entertainment can facilitate an exchange of cultural expression and history. These initiatives would contribute in assisting local economic development in fishing communities.

Economic Development and Equity Distribution

To enhance co-operation between the different commercial companies and local fishing sectors during the interim transformation period of developmental partnerships, the industry should be nationally managed by a board of inter-sectoral directors elected from both the commercial and local fishing sectors. This would contribute towards:

- The development of a national inter-sectoral economic and industrial strategy for the marine industry.
- Investigating how access to financial resources and infrastructure can be equitably utilized between different sectors.
- Assessing ways of stimulating local, regional and international markets.

As the natural resources of the country are a national treasury, it would be beneficial to co-manage its industrial value. This would decrease competitive effort to overexploit the natural capacity of the resource, and increase inter-sectoral monitoring of industrial regulation and enforcement policy. As a result it would enhance the industry's contribution to a more self-reliant and efficient marine management regime. From this national inter-sectoral management perspective, the industry's value would be able to be equitably distributed to social investment enterprises in fishing communities, based on their different social need priorities.

Sustainable Socio-Economic Viability

The inter-sectoral directorship of the marine industry, in consultation with the co-management council, will pool a voluntary agreed percentage of industry profits of all commercial and local sectors into a national profit margin. This profit margin is proposedly divided into:

- Industrial earnings, valuing 60% of the total profit margin. This pays for self-sustaining industry management, development and scientific research.
- Resource tax, valuing 30% of the total profit margin. This pays for the institutional administration of the co-management structure.
- Social investment, valuing 10% of the total profit margin. This would be allocated to local community development policy and programs in local fishing communities.


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Community Development Enterprise

The co-management council will need to establish a social investment unit responsible for the management of a community development enterprise to alleviate poverty by improving and developing local infrastructure and enhancing community support systems in local fishing communities. The enterprise will operate through business-community organizations in local fishing communities, responsible for the coordination of different community development initiatives and stakeholders. The operation is managed in collaboration with local government agencies and non-government organizations

(NGO's) in the local area to establish linkages and synergies in developing and implementing community development programs and projects that address key needs in each local fishing community. In this manner the business-community organization does not seek to replace or compete with existing initiatives and programs, but assist as a financial parameter in pursuit of an integrated and coordinated framework of priorities and needs identified by the community for themselves. The co-management social investment unit will have an administrative responsibility of reporting to the co-management council secretariat on community development program development, implementation, evaluation and progress.

The main focus of the community enterprise will be the implementation of the sustainable development framework by supporting effort to:

- 
- Improve access to basic service infrastructure and essential services.
 - Maximize income generating and earning opportunities.
 - Sustain life-long learning and skills development.
 - Strengthen community-based organizations and community leadership by resource sharing and public participation in project management and programs.

Providing shelter, basic services and life-skills to the very vulnerable sectors will assist in improving livelihood opportunities, and contribute to reducing levels of dependency on the illicit economy of alcohol, drugs, prostitution and crime. Furnishing citizens with

relevant skills and competencies to improve prospects for work in formal and informal economy reduces the barriers to entry of historically disadvantaged economic actors and fosters self-reliance. Empowering communities to articulate and champion their needs strengthens social capital to create a caring civil and community culture. This improves responsiveness, enhances developmental project performance and program sustainability.

The business-community organization will operate through existing self-organized community organizations, NGO's and local government agencies in the fishing communities, and spontaneous neighborhood associations in relation to new local activities. These social actors would need to assess their local needs in mobilizing finances, implement, operate and maintain facilities and services in the community, and channel these inputs into the social investment community development policy process. The co-management business-community organization would then invest in the community-directed development activities, based on the assessment of each community stakeholder capacity. Government, in the public-private co-management partnership arrangement, will focus on regulating, monitoring and evaluating private sector partnerships with local fishing communities.

The business-community organization will focus on evaluating the implementation, operation and maintenance of investment programs in local development projects. Organizational and technical support will be mobilized within the community development enterprise to enhance community stakeholder input into planned public infrastructure investment programs and social services delivery and management in local

communities. The specific organizational requirement in local communities will be assessed depending on the tasks, responsibilities and capacities of local organizations. Additional support will be given to local agencies whose organizational characteristics and infrastructure need to adjust in corresponding with functional requirements of development projects.

4.4 Summary

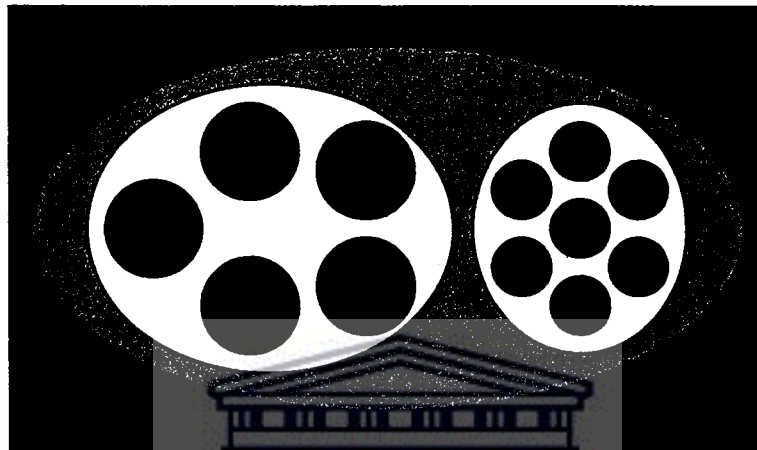
The chapter summary conceptualizes the overall outcome of the application of Public-Private Partnerships to the sustainable development of the marine industry in South Africa. It summarizes the process in 5 phases leading to the *Sustainable Resource Management Model*²⁵ developed in this chapter. The institutional outcome of the model balances the subjective historical ethic of unequal industrial development and wealth distribution in the pre-democracy South African marine industry, with objective economic viability and community development, as an overall outcome of the developmental application of Public-Private Partnerships. The 5 Phase restructuring stages are illustrated as follows:

Phase 1: The Differential Industry Stage

The Phase 1 Differential Industry Stage illustrates that in the global marine market the South African marine industry is divided between the established commercial companies and the marginalized small-scale fishing communities. The phase delivers unequal

dividends from the global market to the South African society. This produces unequal community development, and results in the phenomenon of rich and poor within the marine industry.

26



-  The Global market
-  The South African Marine Industry
-  The Established Commercial Companies
-  The Marginalized Small-scale Fishing Communities

²⁵ Refer to pages 80 - 82.

²⁶ The square border surrounding the global market illustrates a closed system that only interacts with discriminatory enterprises within the marine industry of South Africa, which in this case is the established

Phase 2: The Co-management Industry Stage

The Phase 2 Co-management Industry Stage illustrates the unification of all industry stakeholders and actors into a co-management partnership council that would negotiate and plan the equitable restructuring process of the industry.



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-  The Global market
-  The South African Marine Industry
-  The Established Commercial Companies
-  The Marginalized Small-scale Fishing Communities

commercial sector. The circular borders within the square surroundings of the global market illustrate an

Phase 3: The Public-Private Partnership Co-management Stage

The Phase 3 Public-Private Partnership Co-management Stage illustrates the negotiated methods and programs of restructuring the marine industry agreed upon in the co-management council. This would involve the sharing of markets and profits towards commercial and social development.



-  **The Global Market**
-  **The South African Marine Industry**
-  **The Established Commercial Companies**
-  **The Marginalized Small-scale Fishing Communities**

open system that is in the process of being restructured to be more relevant to its social context.

Phase 4: The Public-Private Partnership Restructuring Stage

In the Phase 4 Public-Private Partnership Restructuring Stage, the established commercial companies merge with viable small-scale operators into equity partnership enterprises that re-establish the commercial enterprises in the marine industry.

The social investment into community development diversifies the economic interest from fishing to other developing economies of the South African economy, thereby broadening the access to basic life-sustaining goods and services.



The Global market



The South African Marine Industry



The Merged Commercial and Small-scale Companies

Phase 5: The Restructured Marine Industry Stage

In the Phase 5 Restructured Marine Industry Stage the industry would have restructured into equitable, efficient and self-sustaining enterprises that successfully compete in the global marine market with profitable returns to be voluntarily invested into community development.

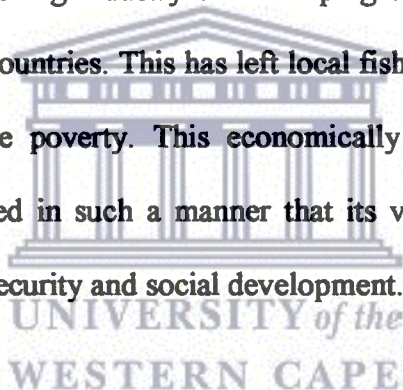


The above 5 Phase restructuring process establishes leverage in the marine industry of South Africa, which forms the foundation on which equitable, economically viable and efficient enterprises can develop, based on the objective criterion of the *Sustainable Resource Management Model*.

CHAPTER 5

CONCLUSION

The historical development of the world marine industry established the importance of marine life as a highly sought after delicacy in rich developed countries, and as a source of highly protein enriched food supplement that can contribute to the alleviation of food insecurity in poor third world countries. Past development efforts have mainly focused on large-scale operators in the fishing industry of developing countries to supply the high-income market in developed countries. This has left local fishing communities around the developing world in absolute poverty. This economically exploited natural resource therefore needs to be managed in such a manner that its value be prioritized between economic profitability, food security and social development.



The management of marine resources has largely had a biological approach to the science of marine management. This was mainly due to its MSY theory in concerning only the economic value of the resource. But with the inclusion of social concerns to the marine industry, its management of the resource has been extended to include the institutional development and management adaptive to economic and social implications of managing marine resource life. Balancing social and economic concerns within the marine industry drew on the evolution of development practice which concluded that co-managing the

²¹ The equal access opportunity environment of the restructured marine industry opens-up the global market for any economically viable and efficient enterprise, thus the border shape of the global market changed from its initial squareness to the open system of the circular border.

marine regime by public and private stakeholders broaden the scope of knowledge that would inform policy decision-making, resulting in a more proficient system, and an efficient marine management regime. Within this context, managing marine resources had to become an institutional building towards a collaborative partnership between public and economic policy, through Public Private Partnerships.

Public-Private Partnerships combine public and economic policy, with a social investment community development organizational structure that facilitate local community and economic development. It promises to restore a proper balance between big and small-scale economic opportunities, by creating conditions for broad participation in economic and industrial planning and development. This approach stabilizes the industrial sector as labor is absorbed beyond short-term profits into a continuous stimulating cycle of economic growth. The Public-Private Partnership paradigm interpret it as empowerment growth as the commercial sector assist the local entrepreneurial sector to become commercially viable, and at the same end create individual and social benefits that are translated into the widening of the distribution of basic social goods and services. This would raise the level of living in local communities to access better education, higher incomes and stimulate the entrepreneurship in other industrial sectors of the economy.


Public-Private Partnerships empower local actors to create their own needs of their environment by facilitating their social creativity in the participation of economic and public policy development. It has the understanding that humans has a primary role as

creators of environments and therefore need a participatory governance system that cater for the maximum scope of people's creativity in solving their own immediate social problems. It has been found that participatory governance is holistically better equipped with information that guides to more effective decision-making and more efficient outcomes. The fact that various kinds of information is held and supplied by various stakeholders in the participatory process increases the chances of them taking ownership in, and becoming committed to the outcome of the decision-making process. This would mean incorporating institutional building at the local level to enhance the capacity of local stakeholders in the participatory institutionalization of Public-Private co-management.



Institutionalizing Public-Private co-management partnerships manages the diverse expectations of different institutional actors by regulating their social behavior and interaction within the institutional framework. These institutions and the information they possess facilitate individual and collective decision-making by coordinating the cooperation between different actors, which result in stability of institutional expectations and predict consistency in institutional action. Institutional interaction of public-private actors involves participation within an on-going horizontally interactive process of compromise and co-management. This system of administrative governance creates the environment where multiple social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities.

In assessing the theoretical application of Public-Private Partnerships to marine management in South Africa, a case study of the marine industry was formulated. The study described South Africa as having a relatively small self-sustaining eco-biosphere environment. It supported a maximum exploited sustainable yield of marine resources by a very well established commercial sector. This sector, mainly 'white' due to the previous racial apartheid dispensation, received all the economic, social and political benefits through the exploitation of the marine resources of the country. The post-apartheid 1994 democratic mandate sought to transform this past, to a present and future where all citizens could participate equally and reap equitably from the marine industry.



Within the constraints of South Africa's already fully utilized natural resource environment, it was found that the industry could act as an alternative development stimulator by establishing community development enterprises. This would facilitate the development of alternative employment opportunities that would enhance and widen the distribution of basic life-sustaining goods. It incorporates the need for Public-Private Partnerships to combine public-industrial policy, with a business-community organizational structure that would facilitate local economic and social development programs.

The case study of the marine industry in South Africa also revealed that its evolutionary development was compatible to the evolutionary phases of development practice, and its applicability to marine industry development. This formulated the insight that the South

African marine industry is at the preparatory stage for the institutionalization of participatory co-management, evident in its policy framework for resource management. This developmental context is found within the Directorate: Integrated Coastal Management and Development, at Marine and Coastal Management, the government agency responsible for marine management in South Africa. The research developed an institutional model that would guide the management and coordination of this newly established government agency in instituting Public-Private Partnerships.

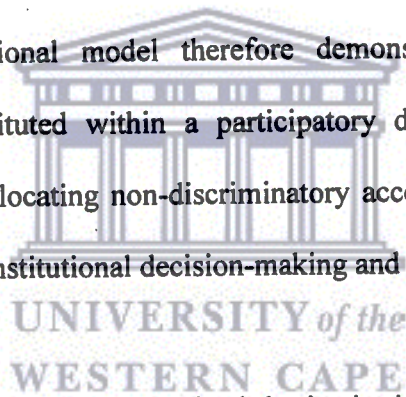
The Public-Private institutional model designed by the research study dealt successfully with the research problem definition by drawing together the private sector and public policy models into a cooperative public-private developmental system. Its aims were achieved by resource co-management that sustains the use of the resource, and the equitable distribution of its resource value to sustaining human life dependent on it. This was inline with Marine and Coastal Management's role of facilitating sustainable development by integrating human needs and natural resources.

The Public-Private institutional model operationalized the White Paper for Sustainable Coastal Development (2000), the "Sustainable Coastal Livelihood Study" (2002), and the function of the Directorate for Integrated Coastal Management and Development. This was achieved by ushering in a pluralist approach of co-management found in the participatory governance system of the model's administration, incorporating all stakeholders in a variety of roles. It therefore supports the hypothesis that people should

be empowered to participate in their social context, to the end goal of equitable sharing of resource-related benefits and responsibilities.

The concept of Public-Private Partnerships successfully applied the development practice model to the sustainability of marine resources, which prescribed an institutional arrangement of a participatory co-management regime in the marine industry. It facilitates local community involvement in coastal management within context of alleviating poverty as perceived by the local fishing communities.

The Public-Private institutional model therefore demonstrated how resource user participation could be instituted within a participatory democratic social order, by defining all stakeholders, allocating non-discriminatory access to resource benefits and specifying mechanisms for institutional decision-making and management.



The research study successfully conceptualized the institutionalization of Public-Private Partnerships, with its conceived benefits of facilitating marine resource institutional economics towards community development enterprises, in the marine industry of South Africa, and thereby institutionally structuring the Marine and Coastal Management's Directorate: Integrated Coastal Management and Development.

The study has therefore demonstrated that an institutionalized relationship between Private (commercial sector) and Public (fishing communities), with Government as

enabler and regulator, through PPP's, would contribute towards sustainable economic growth and social development.



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