

2 STRATEGY

Since 1999, the perception of the status and potential role of aquatic resources with regard to the world food challenge has changed dramatically and, at the same time, the constraints on these resources have become more evident. New conditions and visions have emerged and were presented in chapter 1, the more relevant being:

- The acknowledgment of the highly worrying situation of world's fisheries with a large number of stocks being overexploited and a low efficiency of moratorium policies to restore stocks. Correlatively, aquaculture will have to play a key role and should progress substantially just to maintain the per capita consumption rate of aquatic products worldwide. In this context, LVFF will be a strategic issue for developing countries and aquaculture in these countries will have to produce most of the expected increase of this production.
- Impacts of human activities on aquatic environments (e.g. pollution and the effects of dams, irrigation infrastructure and urban development among others) play a major and growing role in the reduction of aquatic resources and could overcome policies aimed at reducing fishing pressure. Demographic growth (mainly in coastal areas or those bordering inland water bodies) and climatic changes will further contribute to this already problematic situation. At the same time, there is an increasing awareness on the importance of ecological services provided by aquatic ecosystems (e.g. climate regulation, maintenance of water quality and biodiversity) and the detrimental effect of food production from increasingly intensive production systems may have on their capacity to provide global services (ecological and marketable). Aquaculture is not free of responsibilities in this respect and shrimp mariculture is well recognized as emblematic in this context.
- Finally, there is an increasing awareness about the shortcomings that aquaculture development based on a top-down dissemination strategy has on long-term efficiency goals. New bottom-up approaches based on socio-economic analysis of production systems to understand their constraints appears much more relevant even if sometimes less productive in the short term. In summary, there is shift is from "we will tell people how to grow this fish" to "how to make people interested in producing fish".

This chapter describes and analyses the strategies that ICLARM/WorldFish Center has developed from 1999 to 2005 to face these challenges. The strategies are analyzed and reviewed in terms of general principles, definition, implementation and mode of action. Analyses of the Center's approach, criteria and procedure for selection and mobilization of significant partners (i.e. "partnership strategy") is presented in chapter 5. The Center's organizational structure and operational setting (i.e. the "management strategy") are analyzed in chapter 6 and 7 of this report.

2.1 The 2000-2020 Strategic Plan

ICLARM reviewed through a participatory process with its partners its strategy and priorities in 1998/99 just before the 2nd EPMP. The Strategy was published as ICLARM Strategic Plan 2000-2020.

At the Center of this strategy is the decision to adopt a systems approach to formulate integrated models for management and governance of aquatic resources. The Center

identified and prioritized six “aquatic resource systems” (ARS) defined as the “zone of convergence of the resources, their aquatic environment and the human users” which are listed in order of importance (Table 2.1).

Table 2.1 Definition of the eight ARS and main regional implementation areas

ARS	Priority	WANA*	SSA*	SA*	ESEA*	Mekong	SIDS*
Ponds	Very high		X	X	X		
Coral reefs	Very high		X		X		X
Floodplains, Streams and Rivers	High			X		X	
Coastal waters (including estuaries and lagoon)	High		X		X	X	X
Small water bodies, reservoirs and lakes	Medium		X				
Soft bottom shelves	Medium	X	X	X	X		
Upwelling shelves	Low						
Open oceans	Low						

* WANA = West Asia and North Africa; SSA = Sub-Saharan Africa, SA = South Asia; ESEA = East and South-East Asia, SIDS = Small Island Developing States (mainly South Pacific)

The Plan initially had nine programs although the 2nd EPMP Panel suggested that the Program structure be consolidated to:

- release senior scientists time from administration and management;
- improve external understanding of program structure and objectives;
- increase opportunities for interaction among projects and scientists;
- foster closer linkages between the Deputy Director General for Research and program leaders; and,
- reduce overhead and transaction costs.

Over the years the priority areas in the Strategic Plan were fine tuned and significant structural changes have been made to the programs in the context of the Center’s Medium Term Plans (MTP). The Center consolidated its nine programs into four main programs and a fifth program that provided support to all the four main programs (Biodiversity & Genetic Resources; Freshwater Resources; Coastal & Marine Resources and Policy Research and Impact Assessment). The number of thrusts was also modified in each MTP to improve clarity in the explanation of the Center’s research plan. The structural changes and modifications were always made against the backdrop of world events, particularly the outcomes of the World Summit on Sustainable Development, the Millennium Development Goals (MDGs) and the on-going trends of overexploitation, reduced production and increased demand for fish and other aquatic resources.

The Center also took concrete steps to maximize its impact by clustering its efforts in specific areas or ‘geographies’ including by starting a regional program in the Greater Mekong Region and expanding its work in Africa. Work in mainland Latin America was not a priority though, the Center was open to extending its generic technologies (e.g.

trawl data analysis, economic analysis and small-scale aquaculture approaches) to NARS of the region, when opportunities emerge.

In essence all the changes represented an evolution of the Center’s research program rather than a significant departure in new directions.

2.2 Strategy Update 2005

In September 2005 the Board approved a Strategy Update for WorldFish. The Strategy represents WorldFish’s approach to continue to respond to the challenge of meeting the MDGs with a fish focus in the light of the newly articulated priorities of the CGIAR. Impact research undertaken by WorldFish has demonstrated that investments in fisheries and aquaculture can play a vital role in helping to achieve both the CGIAR goals and the MDGs. The direct intervention or entry points in the framework of the Strategy are with regards to the eradication of extreme poverty and hunger, to ensure environmental sustainability and the promotion of gender equity and the empowerment of women.

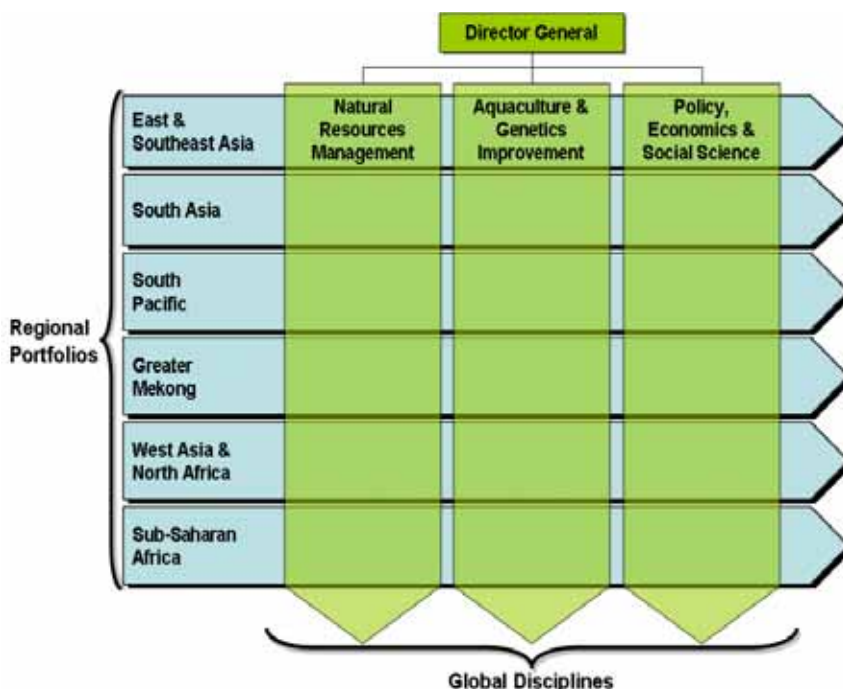
This strategy proposes to take into account some perceived weaknesses of the previous WorldFish setup, in particular:

- the “lack of clear accountability for competing geographic, global and program priorities”;
- the existence of an “incoherent rationale for site/country selection – mixture of regional and country-specific mandates”;
- an “unclear accountability for front-end development of new projects and funding opportunities”.

2.2.1 Matrix management

The matrix management is one of the important innovations in this strategy, the new Programmatic Structure consisting of a matrix of three disciplines interacting with six to eight regional portfolios (Figure 2.1).

Figure 2.1 WFC’s Research Structure: the matrix (Source: WorldFish Center)



The three global disciplines are Natural Resource Management (NRM), Aquaculture and Genetic Improvement (AGI) and Policy, Economics and Social Science (PESS). The portfolios cover South and South East Asia, Greater Mekong, South Pacific, South Asia, Sub-Saharan Africa, North Africa and West Asia.

WorldFish has defined the segregation of the roles of discipline vs. portfolio Directors to provide clarity and alternate career streams for scientists based on their skills and interests:

- Discipline Directors are in charge of the leadership and development of a core science discipline and its application to achieve the Center's mission. They are responsible for: (i) the recruitment and development of staff in the discipline, (ii) the allocation of staff resources from disciplines to projects and (iii) the science strategy and high level science contributions of global significance. They are also accountable for the quality of research inputs and outputs, and for cross-disciplinary coordination. They report directly to WorldFish's Director General (DG).
- Portfolio Directors are responsible for the development and maintenance of research projects aligned with WorldFish mission and for developing high level relationships with investors and partners. They are also accountable for developing opportunities into funded projects and the performance of project portfolio. They report directly to the Center's Deputy Director General (DDG).

2.2.2 *Differentiators and vehicles*

Other characteristics in the strategy are its Elements (Arenas, Differentiators, Staging, Economic logic, and Vehicles), and the internalization of the WorldFish Campaigns to reside beneath the "Fish for All" banner. In addition, there are now milestones which would permit an assessment of performance in the short and medium term, i.e. Thematic goals and Key Performance Goals (KPGs).

Differentiators

For proper partnership identification, the Strategy Update identifies and analyses the characteristics that differentiate the Center from other organizations in research and development in fisheries and aquaculture at global, regional and national levels. The analysis is based on the comparison of a number of attributes such as: (i) the point of focus along the Research for Development Value Chain, (ii) *modus operandi*, (iii) geographic scope and, (iv) organizational status.

Vehicles

The strategic plan defines several *vehicles* required to achieve its overall goals, such as: (i) the establishment of effective partnerships and of key strategic alliances, (ii) the capacity to grow organically and (iii) the capacity to elevate the agenda and galvanize support, i.e. through its 'Campaigns'. Thus:

- A *strategic alliance* refers to a "long-term strategic (...) that is of considerable significance for achieving overall goals". Due to the intensive nature of this institutional relationship only a few number of organizations will be involved in such alliances.
- The Strategic Plan defines *organic growth* as an organizational expansion purely within the Center's current internal research structures and with their traditional investor base.

- In the context of CGIAR System campaigns, the strategy defines three key challenges as focal points for three *WorldFish Campaigns*. WorldFish perceives these Campaigns as a new approach for galvanizing support and action around a set of goals oriented to assist in the achievement of MDGs. In addition, campaigns are explicitly intended to be broader in scope and to provide a framework for action which can help to align interests, capabilities and efforts of a wide range of partners and collaborators to address the problem at hand.

Thematic goals

Three thematic goals have been identified from which the 2005 KPGs have been derived. These three thematic goals are partnership, excellence and growth. Partnership refers to the Center's conviction that development impacts can only be effectively achieved through high quality partnership. Excellence refers to the notion that excellence in both science and the modus operandi are essential to become an effective leader and catalyst for change. Growth is emphasized because with increasing investments in research, geographical spread, global scope and research breadth and depth, a greater impact on MDGs will be achieved.

2.2.3 Comparative Analysis of strategies and Panel assessment

In order to conduct a systematic analysis of potential changes in the strategies developed by the Center during the period 1999-2005 and their possible strengths and weaknesses, a comparative analysis is made in this section based on information reflected in Tables 2.2, 2.3 and 2.5. For this purpose, the ICLARM/WorldFish Center Strategic Plan 2000-2020 will be referred as "Strategic Plan" and the WorldFish Center Strategy Update 2005 will be referred as "Strategy Update".

Table 2.2 refers to the general principles of the Center and it includes its vision, mission, values and long-term goals. Table 2.3 shows the definition and implementation of the strategies and describes objectives, processes, positioning, program structure and priorities. Table 2.5 presents the mode of action and it includes partnership, organizational standards, resource mobilization and performance indicators.

Information used for this comparative analysis has been drawn from two relevant documents: the ICLARM/WorldFish Strategic Plan 2000-2020 (Strategic Plan) and the WorldFish Center Strategy Update 2005.

General Principles

General principles of the Center as expressed in their strategy documents are analyzed with respect to four elements, namely: vision, mission, values and long-term goals (Table 2.2).

With regard to the Center's Vision, it is possible to observe a shift from a problem and people oriented vision documented in Strategic Plan to an institutionally-oriented vision expressed in Strategy Update. In the Panel's view, the Center's institutional vision is useful for in-house motivation, however, inclusion of the more problem and people oriented perspective should be included for external motivation.

Table 2.2 General principles

ATTRIBUTES	STRATEGIC PLAN 2000-2020	STRATEGY UPDATE 2005
Vision	To improve the well-being and livelihood of present and future generations of poor people in developing countries	To be the science partner of choice for delivering fisheries and aquaculture solutions for developing countries
Mission	To undertake, facilitate and disseminate scientific research to improve the production, management and conservation of aquatic resources such as fish	To reduce poverty and hunger by improving fisheries and aquaculture
Values	Not articulated	<ul style="list-style-type: none"> • Integrity and trust • Fairness and equity • Excellence and innovation • Team work and sharing knowledge
Long-term Goals	<ul style="list-style-type: none"> • Poverty eradication • Healthier families • Reduced pressure on fragile ecosystems • People Centered sustainable development 	<p><u>Millennium Development Goals (10 years)</u></p> <ul style="list-style-type: none"> • <u>Direct intervention on:</u> <ul style="list-style-type: none"> ○ Eradicate extreme poverty and hunger ○ Promote gender equity and empower women ○ Ensure environmental sustainability ○ Develop a global partnership for development • <u>Known flow-on benefits</u> <ul style="list-style-type: none"> ○ Universal primary education ○ Reduce child mortality ○ Improve maternal health ○ Combat HIV/AIDS and other diseases

The Center's Mission as stated by the Strategy Update shows a greater emphasis on impacts instead of outputs and outcomes as it was expressed in the Strategic Plan document. The Panel would like to see those three levels incorporated in the Center's mission.

The Strategy Update expresses Values that are in line with modern business management approach and the Strategic Plan does not explicitly show values as such.

The Panel concurs with the Center in the benefits of expressing their values and principles both for in-house and external motivational purposes.

Long-term goals formulated in the Strategic Plan are based on people's livelihood and aquatic resources systems approach. The Strategy Update reflects the new UN Millennium Development Goals. Nonetheless, long-term goals appear to be similar in both strategies.

Table 2.3 Definition and implementation of the strategy

ATTRIBUTES	STRATEGIC PLAN 2000-2020	STRATEGY UPDATE 2005
Objectives	<ul style="list-style-type: none"> • * raising and sustaining the productivity of fisheries and aquaculture • protecting the aquatic environment • saving aquatic biodiversity • improving policies for sustainable development of aquatic resources • strengthening the capacity of national programs to support sustainable development 	<p><u>Objectives of the three WorldFish campaigns</u></p> <ul style="list-style-type: none"> • <i>Global Change and Fisheries</i>: understanding and exploiting the global vectors of change affecting fisheries and aquaculture so that they benefit the poor • <i>Sustainable Fisheries Livelihoods</i>: ensuring a sustainable and well managed supply of fish from coastal and inland fisheries • <i>Pro-poor Aquaculture</i>: increasing the sustainable production of fish through aquaculture as a source of protein and income to poor communities
Process and Positioning	<ul style="list-style-type: none"> • Wide consultation and participation by partners • SWOT analysis to determine strengths and weaknesses 	<ul style="list-style-type: none"> • In house brain storming, taking advantage of prior consultation conducted at regional levels (SSA and ESEA) • Positioning on the research to development value chain • Differentiators, attributes vis-à-vis partners (point of focus along RD Value Chain, modus operandi, geographical scope and organizational status) • Unique combination of attributes to be the science partner of choice
Program Structure	<p>Seven research approaches:</p> <ul style="list-style-type: none"> • Ecosystem approach • Integrated aquaculture technology • Aquatic genetic research • Contributions to proper governance • Impact analysis • Monitoring of global issues (IPR, Climate change) • Multidisciplinarity 	<p>Prioritization inside the disciplinary perspectives:</p> <ul style="list-style-type: none"> • Natural Resources Management (NRM) • Aquaculture and Genetic Improvement (AGI) • Policy, Economics and Social Science (PESS)
	<p>Two thematic (BGRRP, PRIAP), two ecosystem (CMRRP, FRRP) and one cross cutting (PIT) programs. Balance: 25% on global research and 75% regional</p>	<p>Three disciplines (NRM, PESS, AGI) by 6 - 8 Regional Portfolios (Matrix Structures)</p>
Regional Priorities	<p>Strategic research prioritization based on</p> <ul style="list-style-type: none"> • Aquatic Resources Systems • Regional distribution of efforts based on existing production systems, NARs capacities and imperatives for research 	<ul style="list-style-type: none"> • Geographic prioritization based on five criteria (Human development need, Resource potential, potential for impact by WorldFish, Enabling environment, Past relationships and need) • Aquatic systems prioritization defined inside each geographic domain (criteria not explicit)

The Panel's view is that both the Strategic Plan and Strategy Update, although formulated in different terms, share the same general principles and are consistent with the CGIAR's mission and vision.

Definition and implementation of strategies

The definition and implementation of the strategies is analyzed on the basis of its objectives, processes, positioning and program structure and regional priorities (Table 2.3).

a) Objectives

The Strategic Plan document shows that the Center was defining a scientific paradigm based on a number of long-term goals, approaches and processes, among which it is possible to highlight:

- i) People Centered sustainable development
- ii) Ecosystems approach
- iii) Strategic research prioritization based on regions and aquatic resources systems.

The Strategy Update makes new advances in the formulation a center's paradigm. Prioritization is based on regions and aquatic resources systems and it proposes to integrate those with a strategic analysis of relevant disciplines.

While acknowledging the progress made, the Panel believes that the above emphasizes the need for further efforts in the elaboration of a holistic and dynamic oriented approach (paradigm). This approach will enable the integration of disciplines required to support policy and decision making, aiming for the attainment of sustainable development of fisheries and aquaculture in developing countries. This should ultimately contribute to poverty alleviation.

As seen by the Panel, a *holistic approach* is one which views and analyses a system from three perspectives, namely: (i) clearly defining the system's boundary, (ii) identifying and characterizing the relevant components of the system, (iii) carefully considering the existing interactions between components and the ways in which they integrate and (iv) accounts for potential influence of external forces (variables) and externalities of the system.

A *dynamic approach* should be applied when modelling and measuring the state of the resource base and its environment over time, as well as when measuring the performance and impacts of human activities and management interventions. These are essential requirements for obtaining the best possible information on the trade-offs between alternative ways of attaining sustainable development.

According to Thomas Kuhn, a scientific paradigm refers to *the set of practices that define a scientific discipline during a particular period of time*. It includes what is to be observed and scrutinized, the kind of questions that are supposed to be asked and probed for answers in relation to this subject, how these questions are to be structured, and how the results of scientific investigations should be interpreted.

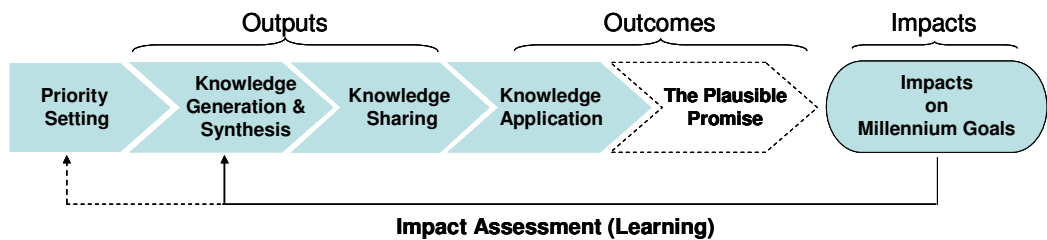
In this context, the Panel's view is that the Center's positioning in the research realm, both within the CGIAR system and within the global context of research on aquatic resource use and management, will benefit from further formulation and elaboration of the scientific paradigm and WorldFish articulation of its own research domain.

b) Process and Positioning

The Strategic Plan indicates that over its 22-year history the Center has developed strong partnerships with national systems (government and non-government organizations), ARIs, individual scientists, the private sector and farmers-fishers. The Center's niche in the research to development (R-D) continuum is placed with respect to its skills, its institutional attributes, its long-lasting partnership and its unique role in the CGIAR and various regional and international forums.

The Strategy Update indicates the broad areas of emphasis and investments in research on the basis of disciplinary perspectives, the categories of outputs to produce, the key technologies and the geographic and aquatic segments to focus upon. This draws on the concept of the "Research for Development Value Chain" (Figure 2.2).

Figure 2.2 The Research for Development Value Chain (Source: WorldFish Center Strategy Update 2005)



Recognizing that there is a multiplicity of factors affecting the degree of impact to be achieved through research, many of which are beyond the control of the Center, the Strategy Update states that the decision to support the Center's work depends on acceptance of some risk by investors. This acceptance is based on the likelihood of seeing a return on investment. An investment decision, therefore, implies the acceptance of what the Center considers a "plausible promise" that impact will be achieved.

In the context of this value chain, WorldFish sees the primary thrust of its research being conducted within the Knowledge Generation & Synthesis and Knowledge Sharing components, thus placing their future work slightly left of the Center in the middle of the R-D continuum. With this perspective, greater emphasis will be given (i) to new synthesis and insights with global, regional and national analyses and synthesis and (ii) to research outputs with agenda setting and advice, knowledge products, tools and networks and capacity building.

Even though consultations with stakeholder had been conducted in the past, the Panel perceives, based on the information it received, that the in-house nature of the design process in the Strategy Update has not ensured sufficient involvement and ownership by partners. Accordingly, the Panel envisages great benefits from enhancing interaction with partners in strategy dialogue. The Panel sees that this will have a positive effect on external motivation with respect to the Center's role in the international arena.

In addition, the Panel's impression is that the Strategy Update focuses too narrowly on the middle of the R-D Value Chain, resulting in a risky position in the long-term with

respect to the future positioning of other relevant players in the R-D value chain. The Panel is convinced that improving the analysis and understanding of the multiple factors influencing the impacts of research on poverty alleviation (*vis-à-vis* the Center's own role in contributing to sustainable development of fisheries and aquaculture), will help to minimize this potential long-term risk (see Chapter 8). In this context, the Panel suggests that further application of the methodological framework developed for impact pathway analysis on research planning and prioritization—at both the Center and program levels—would be very helpful.

Finally, to ensure the production of the appropriate IPGs, the Center should, at the research planning and prioritization process, specify the expected outputs and validate the extent to which they constitute legitimate IPGs.

c) Program structure

The Strategic Plan represents an initial departure from a largely fisheries-oriented perspective towards one aimed at broadening the Center's work by integrating equity, sustainability and efficiency considerations. Thus, the Plan is not only oriented to reinforce the Center's commitment to conservation of aquatic resources but also to promote intergenerational equity of benefits and efficient resource use over time. Its program structure represents a compromise between a disciplinary and a system approach, with two programs that can be considered as "disciplinary" (PRIAP and BGRRP) and the other two having an ARS perspective (CMRRP, FRRP).

As shown in Table 2.3, the main changes observed in moving from the Strategic Plan to the Strategy Update relate to:

- i) The definition of three "disciplines", as a result of the division of FRRP (freshwater program) in fisheries aspects going into NRM and aquaculture going into AGI. In addition CMRRP is also merged into NRM and PRIAP is renamed as PESS.
- ii) The creation of regional portfolios with scientists appointed as portfolio directors.

From a conceptual perspective, the Strategy Update operationally expresses the three "Research Categories" identified under the methodological framework developed for the implementation of Impact Pathway Analysis for Research Planning in 2002-2003. In the Panel's perspective, the "Disciplines" are in fact clusters of scientific disciplines, each cluster having a specific contribution to impact pathway.

Within each "discipline", the strategy identifies areas of work that will be (i) increased, (ii) maintained/adapted and, (iii) what they will not conduct themselves but, should be conducted by their partners as a complementary work. The strategy stresses that the decision to discontinue direct involvement in some type of research does not necessarily imply that the Center considers them irrelevant to achieve the long term goals but, rather reflects the view that the Center's involvement may add little in that direction.

The Panel applauds the establishment of the three disciplines as a means for better generating knowledge, synergy, synthesis and for focusing on the science aspects of living aquatic resources. However, the disciplinary strategies and the fleshing out of the broad areas of emphasis are yet to be elaborated. The Panel cautions that the fusion of aquaculture and genetics and biodiversity, a strategic integration of ideas, knowledge and technologies to contribute to the further development of sustainable aquaculture,

should not become a simple co-habitation of two programs. At the same time the Panel sees in the creation of PESS a good opportunity to forge into maturity the impact culture that is beginning to emerge in the Center over the past few years.

From the disciplinary perspective, there is a need to further formulate the rationale by which scientists residing under the present program structure are identifying relevant research issues or aspects (originated from the identification of problems in the functioning of the fisheries and aquaculture system) that WorldFish will tackle, which will enable the generation of knowledge and information required to contribute to the attainment of sustainable development.

Another relevant aspect is whether the matrix approach is adequate, from a conceptual point of view, to integrate the search for knowledge and information between the three research categories with the needs at the regional and aquatic resources system level. It is the Panel's view that, if all required processes and conditions for an effective implementation of the methodological framework to assess the potential impacts of research are met and the planning, implementation-monitoring and retrospective evaluation stages are met, in theory the matrix system is appropriate.

The Panel perceives that the new program structure is aimed at addressing some earlier weaknesses in the Center research set up, such as increasing opportunities for interaction among projects and scientists, fostering closer linkages between the Director for Science Coordination and Discipline Directors. However, the Panel doubts that this program structure would release senior scientists time from administration and management, reduce overhead and transaction costs and decrease tensions potentially arising between Portfolio Directors (financial resources) and Discipline Directors (limited human resources).

Theoretically, the matrix approach represents an integration tool and provides a potentially fruitful dialectic tension between two visions – disciplines and portfolios. It also would provide for a better regional and global focus and allow the Center to draw on cross-disciplinary linkages effectively, while the differentiation of discipline and portfolio directors is an attempt to segregate and define research, project management, and fund-raising which are now expected of a core group of researchers. However, the Panel's opinion is that managing effective collaboration and taking decisions on resource allocations are hard to make while simultaneously focusing on cutting-edge research. Senior Management may well have to make some difficult and top level decisions in the area of resource allocation between disciplines and portfolios directors.

The Panel agrees with the decision by Management to first recruit Portfolio Directors and continue with the search for Discipline Directors. After the recent appointment of the Discipline Director (DD) for NRM, the Panel was informed of the arrival of a DD for AGI in April 2006. It is the Panel's opinion that discipline directors will first need time to fully understand the strategy that will provide them the flexibility to fine tune implementation, shape their staff, and adjust the pace of change to build good will and the personal sense of value that will influence success. The Panel has been informed of difficulties in the appointment of the Discipline Director for PESS and that the Center does not plan to fill this position until 2007. The Panel emphasizes the need of having this position filled as soon as possible.

The Panel cautions that for the matrix management to work effectively due concern should be given to increase the Center's critical mass and intensify staff training on the matrix to ensure all staff have an excellent understanding to operate within the new system for project and financial management.

As the matrix management structure is likely to exert a considerable influence on the performance of the Center's research programs, *the Panel recommends that the Board commissions an external review of the new research structure by mid 2007 to specifically examine the effectiveness and impact of the matrix approach, the extent of transaction costs incurred and the acceptability by different levels of staff.*

d) Regional Priorities

The Strategy Update realizes the progressive emergence of the importance of regional priorities. The Strategic Plan does not present directly the regional strategies but acknowledge the importance of this issue through the concept of "Aquatic Resource System" and considered that, with regards to the very specific traits of each ARS, the challenge was not to disseminate a "generic output" in all ARS but to have a dedicated strategy for each of them. Even if not present at the strategic level, regional dimension existed at the operational level. The first explicit regional strategy was the "Strategy for Africa and West Asia" elaborated in 2001 and published in 2003.

The limits of considering ARSs as global and coherent entities have been progressively perceived. One of the main problems was that a given ARS can present very different opportunities and constraints and can deserve very different research approaches in the different regions. The regional approach used in the Strategy Update reflects this critical analysis. Within this new framework, regions become real strategic entities: "For each region, a plan is now being developed which addresses the needs of partners and beneficiaries and is responsive to the priorities of donors". In addition, "focal countries" are identified in each region on the basis of six selection criteria (potential for learning, human development need, resource potential, potential for impact, enabling environment, past relationships and need. The concept of ARS remains present but with various priority orders within each regional portfolio.

Even though the two approaches appear to be different from a conceptual point of view, the Panel notices that they lead to quite similar choices from a practical point of view.

The Panel considers that the appointment of regional portfolio leaders having the responsibility to analyze local situations, to define strategies and to seek partners has several obvious advantages. It will support the ambition of the Center to expand which cannot be realized without new partnerships in the different regions. It will provide discipline leaders with relevant information related to ecological, social and economic realities of each country. It should offer the opportunity to establish better co-ordinations with other CG Centers acting in the same regions and to contribute to the definition of global CG strategies for each region. The Panel, therefore, endorses this strategic choice, but at the same time wishes to raise two issues that will deserve attention in terms of management:

- i) There is a potential risk of drift towards short term and location-specific projects, that are frequently more easy to "sell" and more likely to quickly produce visible impacts. To limit this risk, coordination with the DDs should be done "upstream"

to develop a common vision of the type of projects WorldFish should promote and implement.

- ii) In view of its very limited staff strength, it was premature for the Center to appoint 7 portfolio directors, when a limited number could have performed this function and with time and experience additional appointments made. Although the Center intends to put greater emphasis on SSA, the Panel considers it excessive to appoint three out of five IRS ear-marked for the Region as portfolio directors (see Chapter 5).

e) Global priorities and recommendations

The Panel observed that neither the Strategic Plan nor the Strategy Update gives an indication of or provides the decision criteria for the optimal breakdown of WorldFish staff between the different regions or between the different disciplines. WorldFish only refers to the need “to have the required critical mass in all three Disciplines” that will be “distributed effectively across the different geographic area”.

Table 2.4 gives the present breakdown of professional staff as of December 2005 in comparison to the 1999 situation in order to visualize the “implicit strategy” of the Center. This table has been constructed according to the data made available by the Center and refers to the location of the office where the particular staff were based.

Several conclusions can be drawn from this table. First, Asia remains by far the dominant place for WorldFish staff and the investment in SSA is still very limited. The major change concerns WANA with the growth of the Abbassa station between 2000 and 2003. Second, some changes have occurred between disciplines, with a significant decrease of NRM and a slight increase of AGI. PESS remain stable but it should be noted that four of the six regional portfolio directors belong to this discipline. Finally, there is an increase in the number of people involved in general management, especially if DDs and PDs are included in the figure.

Table 2.4 Breakdown of WorldFish professional staff by disciplines and regional areas in 1999 and 2005 (December*) (Source WorldFish 3rd EPMR Doc, # 17c)**

Region	Disciplines		Gnl**		AGI		NRM		PESS		TOTAL	
	1999	2005	1999	2005	1999	2005	1999	2005	1999	2005	1999	2005
E & SE Asia			7	5	14	9	7	5	28	19		
Mekong	-	-	-	-	-	1	-	1	-	2		
S Asia	-	-	2	3	1	1	4	3	7	7		
SSA	-	-	1	2	-	-	-	-	1	2		
WANA			4	5	0	2	1	3	5	10		
S Pacific & Caribbean	-	-	-	-	7	5	-	-	7	5		
TOTAL Disciplines			14	15	22	18	12	12	48	45		
Gnl Management*	6	11							6	11		
TOTAL	6	11	14	15	22	18	12	12	54	56		

* including Manila or Penang Headquarter and Abbassa

** General management (not including discipline and portfolio directors)

*** People left in 2005 are not considered

Regional strategies have not been elaborated for all regions. The Panel suggests that in developing these regional strategies, priorities are clearly articulated, indicating in which specific areas the Center will be investing more (or less) in the future, and the explicit criteria for those choices.

Finally, given the potential tensions between Directors than could result from a too general articulation of priorities and the recognized need to reinforce both Disciplines and Portfolios, the Panel urges the Center to more explicitly define in its strategy the medium term objectives it has for the breakdown of its scientific staff by disciplines and regions.

Modes of Action

Mode of action are analyzed with respect to four elements: partnership, organizational standards, resource mobilization and performance indicators (Table 2.5).

a) Partnerships

The need for a more selective partnership strategy, i.e. strategic alliances, is fully recognized in both documents but, it is still to be defined and implemented. This point is a key aspect of human resources mobilization, as discussed below. General aspects of partnership are discussed in Chapter 5

b) Organizational standards

The Strategy Update puts considerable emphases on internal institutional characteristics, i.e. excellence and growth, in addition to the quality of interfacing through networking and partnership. In the Panel’s view these standards are in line with modern management principles and are further discussed in Chapter 7.

Table 2.5 Mode of Action

ATTRIBUTES	STRATEGIC PLAN 2000-2020	STRATEGY UPDATE 2005
Partnerships	<ul style="list-style-type: none"> • Partnership and strategic alliances • Capacity building within NARs 	Partnerships and strategic alliances (vehicles 1 and 2)
Organizational standards	<ul style="list-style-type: none"> • Interaction CG centers • High quality of Center governance • Communication with Stakeholders 	<u>Thematic Goals (3-5 years)</u> <ul style="list-style-type: none"> • High quality partnership • Excellence in science and operation • Growth based on profitability of investment, geographical spread and global scope, and MTP targets
Resources Mobilization	Development of internal capacity	Organic growth (vehicle 3)
	Donor resource mobilization	Economic Logic
	Fish for All Summit	WorldFish Campaigns
Activities	Annual revision of MTPs	Staging and Annual revision of MTPs
Performance Indicators	Provides expected outputs for each ARS and subsequently in MTPs	Annual Key Performance Goals (Designed to clarify expectations and drive behavior)

c) Resources mobilization

The Strategic Plan and the Strategy Update propose two different approaches for the same goal. The Strategic Plan aims at recruiting and retaining excellent scientists through a supportive environment while the Strategy Update is much more oriented to capture the attention of investors (donors) and proposes a proactive policy with devoted people (within the Business Development Office) and Campaigns for attracting new partners.

Attracting and retaining a large number of high quality scientists at the Center is obviously critical to WorldFish's success. However, the Panel envisages that the strategy of internal growth could meet several difficulties in the future for two main reasons.

First, the Center needs to clearly define its positioning in the R-D value chain based on a research domain that has not yet been clearly defined, as discussed earlier in this chapter. This definition, which will have practical implications at local and regional levels, will determine the research needs and therefore, the capacities and abilities required to meet the research challenges. Second, as signaled by the problems the Center has faced in recruiting scientists, e.g. DD for PESS and others, and by the rather high turnover rate of scientists experienced in the past, the number of qualified and highly experienced scientists willing to move from their place of origin appears to be decreasing over time. The Panel believes this situation is far from improving as an increasing number of ARIs, Universities and NARs are engaging more and more in bilateral research activities in fisheries and aquaculture. This is discussed further in Chapters 5 and 7.

In the Panel's view, the Center needs to design an innovative and aggressive strategy to overcome these difficulties. A possible alternative could be to develop a two-pronged strategy aiming at, on the one hand, forming a solid staff of young scientists at the doctoral and post-doctoral level and, on the other, generating strategic alliances with relevant ARIs and Universities, with highly experienced and well recognized scientists willing to take on part time or adjunct appointments. The Center's two senior research fellow positions is a good first step in this direction.

To broaden the staff resource base and maximize its efficiency, the Panel recommends that, within the framework of strategic alliances and the growth strategy of the Center, a pragmatic strategy is defined for leveraging additional resources through a range of joint ventures, including but not limited to co-financing of PhD grants, postdoctoral grants, associated scientists/laboratories in advanced research institutes and calls for joint research proposals.

Another positive outcome of the synergies likely to be generated by this strategy would be to enhance WorldFish's presence in the international scientific community. If the Center were able to properly conceive and implement an aggressive policy of partnerships and linkages this would facilitate the identification and production of relevant IPGs.

d) Activities and Performance Indicators

A more specific annual agenda is described under the MTP. The Panel commends the Center for the definition of institutional KPGs (see Chapters 4 and 6) and related

quantitative indicators, defined under the Strategy Update, which offers a more systematic way of monitoring target achievements in the short and medium run.

2.2.4 Conclusions

Mission and Vision

Notwithstanding the many changes the Center has had to face during the review period in terms both of internal management (relocation of its Headquarter, high turnover of its scientific staff) and the external environment (as seen in chapter 1), the Panel considers that WorldFish has made significant efforts to update its vision, mission and objectives in order to propose to its staff, partners and donors perspectives in the area of fisheries and aquaculture that address the challenges of sustainable development, and are consistent with CGIAR Goals.

Strategy

WorldFish future directions and priorities will be based largely on the strategic analysis that Discipline and Portfolio Directors will elaborate.

While welcoming the potential creativity from and fruitful interactions between Disciplinary and Portfolio Directors, the Panel recommends that WorldFish identify and embrace a limited number of key scientific issues and research objectives that could be achieved within a reasonable period of time (4 to 6 years) and that could:

- *stimulate WorldFish scientists of different disciplines and promote interdisciplinary research;*
- *be recognized by the scientific community as cutting-edge research and, as a result, stimulate collaboration with scientists from both developed and developing countries;*
- *demonstrate the comparative advantage of the Center and its leadership capacity in the field of aquaculture and fisheries for developing countries.*

Chapter 3 will propose some areas that could be explored for such an approach.

Positioning

The WorldFish strategy clearly aims at establishing the Center as the preferred link (a “partner of choice”) in the “Research for Development Value Chain”, with emphasis on knowledge synthesis and sharing. The Panel appreciates the intention of WorldFish to be in the future less involved in knowledge dissemination while remaining attentive to the needs of its partners. The Panel invites the Center to explore the limits and risks of the Research for Development Value Chain as the only paradigm for positioning itself, a topic further developed in Chapters 5 and 8.

Resource mobilization

WorldFish has defined a proactive strategy to mobilize its partners through dedicated people (portfolios), Campaigns, Strategic Alliances in order to increase its critical mass. The efficiency of this strategy can only be fully assessed ex-post, but the Panel considers it at this stage to be promising, while emphasizing the tension that the Center could have to manage between this policy and the new positioning it wants to adopt, i.e. the potential drift towards the application end of the R-D of the Value Chain.

Resource allocation

The Panel observes that WorldFish has previously had difficulties in implementing elements of its strategy that were presented as priorities. The slow growth in human investment in SSA, and the decrease in the scientific potential of the NRM discipline, despite the emphasis put on environmental challenges, are examples of these difficulties. The Panel invites the Center to analyze this problem carefully in order to link available resources to specified priorities more clearly.