Annex 7a: WORKSHOP - Socioeconomic aspects of sustainable management of the international trade of fresh water ornamental fish in the north of South America: challenges and perspectives. Traffic & WWF - Colombia Bogotá, Colombia, July 2005

RESEARCH PRIORITIES

Action	What	What for	How	
Determine the present level of knowledge of biodiversity and conservation. Diagnosis of natural history of the species in each country.		Perform baseline studies to identify holes and specific lines of action.	Construction of a matrix of information by country.	
Population studies	Determine the biology, genetics, population dynamics and ecology of the principal species.	Provide technical information for handling and conservation of the resource	Elaboration of a profile of the regional research project	
Critical management areas	Identify critical management areas	Sustainable management of the resource	Revise information contributed by each country	
Applied research	Develop ornamental fish production models.	Generate competitive economic models of quality and management.	Develop, adjust, and social & technological pilot projects.	
Social empowerment of	Strengthen the autonomy of the first link in	Improve the quality of life of the	Promote the communities'	
fishing communities	the trade chain.	people in the different communities	participation in the previous lines	
Communication strategy [?]				
Arawana	Clarification of the taxonomic status of the population of <i>O. Ferrerai</i> Genetic characterization <i>O. bicirrhossum</i> throughout its distribution. Identification of areas of extraction in conflict	Before deciding if it is advisable to propose the inclusion of the species in Appendix II of CITES, it is necessary to clarify the taxonomic status of the Colombian and Brazilian populations. It is urgently required to know the genetic variability between the main producing river basins of the species to focus on conservation actions and the possible necessity to include the species in Appendix II of CITES	 Morphologic and genetic analysis of the specimens at INPA of Brazil Comparative analysis of genetic material from the main river basins of production. 	

Action	Why	How	Who	Which
Internal revision of the current norms	Identify lacunae, propose adjustments, and make updates.	Internal technical meetings	All institutions involved: central and regional: Government (ministries-productive sector, environment specialized institutes Academia and research institutes Associations and communities NGOs	Prohibitions & Quotas. Species prohibited or allowed. Maximum size (rays, Brazil). social protection of fishermen. Distribution centers, commercialization. Health. Conservation (endemism, research lacunae, areas of protection). Introduction of species. Genetic resources. Technological packages. Control and monitoring.
Regional process of multilateral negotiation.	Legitimize the process of harmonization and the resulting norms.	Elevate at the level of chancellery in each country the necessity of leadership of the initiative. The negotiation should involve interested parties of each country).	Institutions involved: Min. of Agriculture (COL, VEN, GUY), Min. Environment (BRA)- Min. de Production and Commerce (PERU)	Results of the first line of action
norms	Establish unified norms. Guarantee the sustainability of the resource and the commerce. Establish rules of the game more clearly. Diminish illegality. Avoid border conflicts.	Create alliances. Develop strategies of communication and divulgation (borders).	Institutions involved. Central and regional Government (ministries of productive and environmental sectors, and local institutes.	Unified measures and criteria obtained from consensus and negotiation. Certification. Commission should be established to follow the agreement
Adherence to Bi/multilateral agreements	Unify norms and criteria and legitimize agreements.	Diplomatic processes	Governments of each country	Unified measures and criteria obtained from consensus and negotiation.
Continuation and accompaniment	Monitor functioning and effectiveness of the norms, and to make respective adjustments	Through indicators at the local level (statistical, registries, permissions, denunciations, sanctions, etc.)	Institutions involved. Regulatory agencies, office of the judge advocate general, NGOs, communities.	Unified measures and criteria obtained from consensus and negotiation.

Stages of commercial chain	Place in relation to the stage of the chain	Actors involved	Investment (logistics required at the stage of the chain)	Price for species X & Y	Main risks (at each stage of the chain)
Identification of the resource to commercialize producers, exporter, fish collector	Beginning of the process. It generates the primary extraction	Collectors to intermediaries and/or Collectors to exporters	Where the collector has greater autonomy he deals directly with the exporter, he has greater storage capacity, boats and groups of fishermen who work for him. In the case of non-indigenous communities, the community leader that conducts business. In the case of crillos/mestizo, fish are delivered to intermediaries. In the case of the fish collector/intermediary, small scale, few resources, high dependency of imported goods that the intermediary provides. Nuclear family & cultural relations.		Lack of labor unions, organization. Legislation regarding the management of activity makes demands without criteria or norms. Groups (human rights, environmental, etc.) not involved (might interfere?).
Fish collector	Phase of attainment of the resource. Search and extraction, deliver to intermediary or exporter	Fish collector & sometimes organizations	Fish collector & sometimes organizations In the case of the exporter, high investment in search of market, etc.		Qualification in management of the resource and ecosystems. The key is to have government presence to control the activity. Conflicts with government.
Distributor or intermediary	Secondary	Traders, associations, fishermen, environmental regulators	Lack a greater investment in qualification	100% of a stage to another	Clear management criteria
Exporter	Tertiary	Traders, buyers, transporters, importers, Regulators	High! Warehousing, of transport logistics, taxes, permissions/licenses, agriculture and sanitary inspections, commerce patents, regulations.		Breach in payments, mortality, instability of dollar, freight costs. Disloyal internal competition, although free. Dishonest of mortality reporting. Legislation not clear as far as species, volumes.

TRADE CHAIN ISSUES						
Stages of commercial chain	Place in relation to the stage of the chain	Actors involved	Investment (logistics required at the stage of the chain)	Price for species X & Y	Main risks (at each stage of the chain)	
Importer	four	Wholesalers, regulators	High! Warehousing, of transport logistics, taxes, permissions/licenses, agriculture and sanitary inspections, commerce patents, regulations.		If they receive dead merchandise, the freight payment is the same; customs agent receives his share. Contamination of facilities with sick merchandise. Changing market.	
Wholesalers and/or retailers		Importer, retailer	Same as importer on low or medium scale Installations e infrastructure: high or low		Capacity to maintain fish alive: experience and knowledge. Only a 10-day guarantee on live stock.	
Retailers	final	Large and small retailers. animal rights Groups	Same as importer on low or medium scale Installations e infrastructure: high or low		Capacity to maintain fish alive: experience and knowledge. Only a 10-day guarantee on live stock, regulation of stores, veterinarians depend if owned outright. Buyer must receive a one-week guarantee. They only buy what comes from breeders vs. green. Contamination.	
Consumer	final				It depends on one's financial conditions. Poor choice of fish due to inadequate conditions or knowledge. Lack of knowledge. They can be specialized or not. Obsessive Hobbyist has little risk, but is small part of the market. Introduction of non-native species. It depends on the local climate. Belief in purchase of wild resources is bad, green seal is necessary.	

COMMERCIAL PRIORITIES						
What	Why	How	When	Who	Responsible	With what
Improvement of quality product: Transference technology training	Offer a quality product and improve the quality of life of the fish collectors	Projects of management and education on the part of the government, private business, NGOs	Short term	Government, Traders, Fishermen, NGOs, Research Institutes, Universities	Government, Traders, Fishermen, NGOs, Research Institutes, Universities	Each sector contributes
To create awareness in the final consumer that it is good to buy native fish.	To improve the conditions of life for the communities of fishermen and for promoting the preservation of the environment.	Research institutes, specialized hobbyist magazines Public relations, WEB companies, OFI, company documents packaging	Short, medium, and long term	Government, traders, fishermen, NGOs, research institutes, universities, public aquariums, aquarist associations, OFI, government export promotion agencies	Government, Traders, Fishermen, NGOs, Research Institutes, Universities	Each sector contributes
Improve the image of the industry with the regulatory institutes	To generate confidence between both government and trade.	Establishing a more open exchange of information	Short term	Fishermen unions, intermediaries exporters, Institutions tied to the sector	Fishermen unions, intermediaries exporters, Institutions tied to the sector	Own efforts
To maintain the artisan fishing methods for low environmental impact.	To maintain fishing tradition, TO avoid displacement of the population (urban migration)	Avoiding the use of methods of fishing of high impact (legislation)	When government decides	Government	Government	Government contribution
Solicit governmental incentives to promote the activity	To improve and to be able to compete with Asian countries and to level the competition. To improve prices to the fishermen.	Through such incentives	Short tem	Government, traders, fishermen, NGOs, research institutes, universities, public aquariums, government export promotion agencies	Government, traders, NGOs, Research Institutes	Reductions of taxes. Diminish fuel costs in fishing area
Define norms for the establishment of companies.	To improve the quality of the fish, thus conserving them. For a control of the activity	By means of the organisms corresponding to each country.	Immediate for new companies and with a limit for companies already established.		Government, traders,	Written requests
Design a virtual services platform.	Improve the management of companies.	Defining lists of common of fish between countries. Choose the five most important products	Immediate	A virtual platform in SI Amazonia (?) in the server of the IIAP. Exporter associations.	Designate in each country the institution that coordinates and elaborates the reports related to the five	The expenses that obtain at level of the organization of the information of each country.

		between countries. Design an information system or reports about freight routes and costs from places of origin to final destinations of each country, shipping agent costs, standardized packing cost. Reports of movements of species in each country.		Agencies of the ministries that control the export of fish. Agencies of aquaculture. Association of freight agents. Representations of customs agents.	main common fish between countries, legal fishing periods, prohibited species, movement of the fishing of these five species. To articulate with OFI, OATA, PIJAC. A place to present research projects with links to the corresponding web pages.	
International program of green seal certification: Pilot Project	To preserve the industry and improve it by addressing critical problems, taking advantage of opportunities.	Develop to rules and standards for the industry to obtain this certification.	Within three years	PSMOFM Project Piaba New England Aquarium MAC Traffic WWF	PSMOFM Project Piaba New England Aquarium	Resources from the participant organizations

COMMERCE

- 1. To identify problems by fishing region
- Quality: Average capture, storage, transport conditions, unloading and within installations
 Social impact programs that can demonstrate to the final consumer that wild-caught fish contribute to indigenous or racially mixed communities so that they can preserve the environment.
- 4. Investigation of the market, optimal capture for each region
- 5. Education in all the levels of the productive chain