## DARWIN INITIATIVE PROJECT SCHEDULE ref: 162/08/126

Organisation name: Imperial College with the Instituto de Pesquisa Ambiental da Amazonia (IPAM)

Name of project: Fisheries Management for biodiversity conservation in the Brazilian Amazon

**Project purpose:** The evaluation of fisheries management approaches to the conservation of floodplain (varzea) habitats and the associated biodiversity.

Project objectives: an analysis of the economic strategies of the different types of commercial fishers; an analysis of the responses of commercial fishers to alternative management measures; an analysis of the role of the fisheries sector within the Amazon regional economy; production of a socio-economic model to predict the responses of commercial fisheries to alternative management regimes.

**Length of project:** April 1999 for three years.

**Total project cost:** £238,725

**Darwin funding profile :** 1999/2000 £41,458; 2000/2001 £39,958; 2001/2002 £39,958

Other sources of funding: IPAM will contribute £117,351 covering their salaries, fieldwork and workshop expenses and some transport and computer costs.

**Expenditure profile :** see Table A

**Target outputs:** see Table B

**Implementation timetable with milestones :** see Table C

**Key staff inputs :** see Table D

First report (1.4.1999 to 30.9.1999) **Reporting requirements :** 31 October 1999 Annual report (1.4.1999 to 31.3.2000) 30 April 2000 31 October 2000 Six month report (1.4.2000 to 30.9.2000) 30 April 2001 Annual report (1.4.2000 to 31.3.2001) Six month report (1.4.2001 to 30.9.2001) 31 October 2001 30 April 2002 Annual report (1.4.2001 to 31.3.2002 30 June 2002 Final report.

Arrangements for monitoring trainee outcomes: The training will be evaluated by the quality of theses and scientific publications the trainees produce.

		PROJECT COST					
Total Darwin Grant : £121,374							
Annual Distribution of Darwin Grant							
1999/2000 £41,458 2000/2001 £39,958 2001/2002 £39,958							
DARWIN GRANT: EXPENDITURE DETAILS							
Expenditure details	1999/2000	2000/01	2001/02	Total			
Rents, rates, heating, lighting, cleaning							
Postage, telephone, stationery							
Travel, subsistence							
Printing							
Conferences, seminars, training							
Capital items							
Other:							
Salaries							

PROJECT OUTPUTS						
Year	Output ref. no.	Details				
1999/2000						
July 1999	4	4 Brazilian undergraduate students trained in fisheries data collection				
Nov. 1999	8	2 weeks in Brazil (PI)				
Dec. 1999	8	15 weeks in Brazil (RA)				
Feb. 2000	11B	Paper on profiles of regional fishing fleet submitted				
2000/2001						
July 2000	11B	Paper on economic analyses of fishing strategies in each of the major ports submitted				
Oct. 2000	8	15 weeks in Brazil (RA)				
Oct. 2000	8	1-2 weeks in Brazil (PI)				
Jan. 2001	11B	Paper on fisher's response to management measures and other conditions submitted				
2001/2002						
April 2001	11B	Paper on the role of fisheries in the regional economy submitted				
June 2001	14A	Workshop I				
June 2001	8	1-2 weeks in Brazil (PI)				
July 2001	8	10 weeks in Brazil (RA)				
Nov. 2001	14A	Workshop II				
Nov. 2001	8	5 weeks in Brazil (RA)				
Nov. 2001	8	2 weeks in Brazil (PI)				
Feb. 2002	9	Report on the evaluation of fisheries management strategies for Brazilian Government agencies				
March 2002	11B	Paper on bio-socio-economic model of different regional fisheries submitted.				

PROJECT IMPLEMENTATION TIMETABLE					
Date	Key milestones				
1999/2000					
By Sept 1999	Analysis of the existing landing data in all four major ports completed.				
	Profile of the regional fleet developed.				
By March 2000	Carry out interviews of fishers				
	Review meeting I (Brazil)				
	Analysis of the economic strategies of the different types of fishers complete				
2000/2001					
By Sept 2000	Analysis of the responses of commercial fishers to management measures and other external conditions completed				
	Start the analysis of the study on the role of the fisheries sector within the Amazon regional economy.				
By March 2001	Review meeting II (Brazil)				
	Interviews with firms in fisheries sector completed				
	Complete the analysis of the study on the role of the fisheries sector within the Amazon regional economy.				
2001/2002					
By Sept 2001	First workshop.				
	Formulate socio-economic sub-models.				
	Develop stock dynamics models.				
	Combine the socio-economic and stock dynamics models for study on the interaction between the biological and socio-economic dimensions of the fishery.				
By March 2002	Evaluation of management strategies using the bio-socio-economic models				
	Second Workshop				

## KEY STAFF INPUTS

Dr K Lorenzen

Prof J R Beddington

Research Assistant [Not yet named]

**Brazil** 

Name

Dr D T McGrath

Nefi Marcelo Crossa

Research Assistants:

Alzenilson Santos de Aquino (biology)

Tatiane Patricia Souza (biology)

Vanda Seixas da Silva (accounting)

Elisabeth Araújo da Silva (accounting)

**Grade/Position** 

Lecturer, Project leader

Professor, advice on economics methodologies

Research assistance

Co-ordinator of Varzea Programme, socio-economic research

Fisheries biologist Field data collection

## STAFF TIME ALLOCATIONS (% of time spent on this work)

Name	1999/2000	2000/2001	2001/2002
Dr K Lorenzen	20	20	20
Prof J R Beddington	5	5	5
Research Assistant	100	100	100
Dr D T McGrath	20	20	20
Nefi Marcelo Crossa	20	20	20
Research Assistants	100	100	100