PROJECT INFORMATION SHEET

PIP No : **171**

(To be allocated by MOP)

PART A : BASIC PROJECT INFORMATION

(Must be completed in all cases)

1. PROJECT NAME: **Building Climate Change Resilient Food Systems: Integrating Reservoir and Rice-Fish Systems, Takeo Province, Cambodia. Implemented by Prek Leap National College of Agriculture**

2. PROJECT DATES:

PROJECT START: **1/1/2013**

ESTIMATED COMPLETION: **3/30/2014**

3. TOTAL PROJECT COST: **$168,366**

4. RESPONSIBLE MINISTRY: **Ministry of Agriculture, Forestry and Fisheries**

RESPONSIBLE UNIT:

អង្គភាពទទួលខុសត្រូវ:

5. PROJECT STATUS: **Completed**

DETAILED PROJECT INFORMATION

6. TYPE OF PROJECT: **Free-standing technical assistance**

7. SOURCE OF PROJECT FUNDING: **Grant**

8. THE POLICY AREA OF THE PENTAGON STRATEGY PHASE I THAT THIS PROJECT FALLS UNDER:V

9. THE CONTRIBUTION OF THE PROJECT TO ACHIEVE THE ABOVE POLICY:

10. SUPPORT TO CAMBODIA INDUSTRIAL DEVELOPEMENT POLICY:

Does this Project support to the implementation of the Cambodia Industrial Development Policy? **No**

11. SECTOR:

12. PROJECT LOCATION: (Describe the location of the project and its components.)

13. PROJECT OBJECTIVE: (Describe the major purpose of the project.)

Overall: To develop a climate resilient food system based on linking terrestrial (rice agronomy) and aquatic (rice field fisheries) through process of adaptive learning and co-management capacity building. This integrated approach combining aspects of social-ecological systems, IWRM and rice-fish and rice field fisheries will provide new learning opportunities for the beneficiaries to monitor and adapt their livelihoods to any new conditions thus increasing overall social and ecological system resilience.
Specific:
• Develop Integrated Water Resources Management (IWRM) and adaptive co-management strategies for the KrobTrabek Reservoir in conjunction with local rice-fish farming and rice field fisheries.
• Expand upon previous curriculum work by SRFI-PNCA farmer training to include climate resilience, social learning and adaptive capacity development for government staff and resource managers.

14. PROJECT DESCRIPTION: (Provide a description of the project and all its components.)

The development of social and ecological integrated food systems not only ensures greater food security by providing a diversity of products and livelihood opportunities but can provide the platform or forum to develop the necessary cross level governance linkage to develop institutions for flexible and adaptive governance response to key social and environmental changes. Climate change (CC) is seen as a major type of environmental change which will alter food production systems in unpredictable ways. Climate change in conjunction with other social and ecological change agents will create both internal and external forces impacting upon the Cambodian natural resources and food production sectors. Increased resilience to these climate and social-ecological changes will be facilitated by linking ecological production systems (goods and services) and creating social capital linkages between levels of Cambodian governance including the commune council-community linkages (fisheries, water use associations). In this case community may also include the understanding and acknowledgement of key lower level informal relationships between key stakeholders, private sector initiatives and government representatives. Cambodia is a developing country and extremely dependent on climate sensitive resource sectors such as agriculture and fisheries. Climate change will have both profound and uncertain impacts on the agriculture and fisheries of rural Cambodia. This in turn will impact already precarious dry season rural food security. This will focus primarily on developing resilient water management and food production systems. This requires capacity of both producers and managers (government authorities and regulators) to adapt under these uncertain conditions will depend on their ability to cooperate in the development of flexible and proactive response institutions. There is a need to develop inclusive forward looking strategies to anticipate agro-ecological changes and to respond with adequate social institutions and actions.
Through the previous work of the Marine Institute International (MII)-PNCA (Preak Leap National College of Agriculture project on Sustainable Rice Fish Integration (SRFI) there is now local commitment and capacity to develop rice-fish though the SRFI training and mentor farmer extension methods. This also includes fostering local, private small scale hatchery development in conjunction with an expansion of on-farm pond aquaculture.

15. PROJECT JUSTIFICATION: (Give reasons why this particular project is considered worthwhile.)

The Inland Fisheries of Cambodia from lakes, rivers and both the wild and managed wetland habitats represent an essential resource for food and livelihoods for millions of Cambodians. Fishing is a significant source of employment and income for rural households which comprise almost 90% of the country's poor. About four million people (approx. 29%) derive employment from the aquatics sector. Fish accounts for over 75% of total animal protein consumption. Cambodians are considered one of the highest per capita consumers of fish in the world (a recent estimate of 66 kg per person per year from household surveys). An annual estimate of inland fisheries production is approx. 400,000 tons, which rank Cambodia in the fourth largest country in the world after China, India and Bangladesh. Its estimated value ranges from US$ 250 million to US$ 500 million, representing considerable revenue (~ 10% of GDP) for the Government. The fisheries sector plays an important role in the national economy and food security of the country and therefore contributes significantly to the national development objectives (So Nam and B. Roitana, 2005). Food security to Cambodia is the adequate essential production, quality and access to fish and rice. There is a diversity of reservoir systems throughout Cambodia which could be better integrated into multi-use management regimes (Welcomme et al. 2010; Welcomme and Bartley, 2002) currently reservoirs are primarily used for holding water for double cropping irrigated rice farming.

16. BENIFITS: (Who will benefit, directly and indirectly, from the project?)

These will include local resource users (farmers and fishers); FiA/Takeo cantonment staff; PDA staff; Commune Council members; Community Fisheries, and Water Use Association members; PNCA research and teaching staff, Community resource associations (farming, fisheries, water-use).Takeo is a key rice growing area in Cambodia, thus will be impacted to a greater or lesser extent by climate change. The integration of Krob Trabek reservoir is a key to implementing broader; to developing culture-based capture fisheries management and to better link these management activities to the local hatcheries and rice-fish systems thus providing increased food system resilience. Farmers and fishers are obviously impacted by climate change in relation to water-fish availability. Other non-resource use beneficiaries will be benefit from increased climate and environmental change awareness through their participation in adaptive learning activities and aquatic resource management.

17. FEASIBILITY STUDY

Is a Feasibility Study for the project required? **No**

If YES, has it been carried out? **Not yet**

18. SOCIAL & ENVIRONMENT IMPACT: (Briefly describe the effects of the project, if any, on the people and the surrounding enviroment. Will the project assist in alleviating poverty?)

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19. CLIMATE CHANGE

a. Is any activity or output of the project related to Climate Change? **No**

b. How is the project relevant to Climate Change?

Please select a Climate Change related sector of the project and fill up the contribution of the climate change related expenditure compared to the total project cost.

Climate Change-Related Sector	Percentage	Climate Change Relevance

20. DISASTER RISK REDUCTION

Is any activity or output of the project related to Disaster Risk Reduction? **No**

21. GENDER ANALYSIS: (How does the project affect the roles of the men and women in the project area? Will women be actively involved in the implementation of the project?)

N/A

22. CAPACITY TO IMPLEMENT: (Does the Ministry have the skills and experience required to implement the project?)

Integrated rice and fish system

23. STATUS OF PROJECT IMPLEMENTION: (Provide a brief update on the progress of the project to date. Discuss any major problems causing delays in project implementation.)

N/A

24. PROJECT PRIORITY: (Please indicates the priority ranking of the project decided by the ministry/agency.)

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25. DONOR INVOLVEMENT: (Provide any information on current or potential donor involvement in the project.)

UNDP, Ministry of Environment, Provincial Department of Agriculture (Takeo) and Instructors at Prek Leap National College of Agriculture, Network of Aquaculture Center in Asia-pacific (Thiland), Marine Institute /Memoral University (CANADA)

PART B : PROJECT COSTS AND FUNDING SOURCES
(In US$'000)

INVESTMENT COST	2015		2016 Budget	2017 Estimate	2018 Estimate	2019 Estimate	3yr Total 2017-2019	Recurrent Cost Est.
	Budget	Actual						
Operational Expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Salaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Materials + Admin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditure	168.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consultancy (i.e. TA) + Admin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equipment+ Furniture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Training	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	168.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL COST	168.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FUNDING SOURCES	2015		2016 Budget	2017 Estimate	2018 Estimate	2019 Estimate	3yr Total 2017-2019	
	Budget	Actual						
Project Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Government Funding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash Input	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other Resources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Donor Funding	168.4	0.0	0.0	0.0	0.0	0.0	0.0	
UNDP	168.4	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL COMMITTED FUNDING	168.4	0.0	0.0	0.0	0.0	0.0	0.0	
FUNDING REQUIRED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
(Total Cost - Funding Available)								

Seen and Approved by Minister

(Signature)

Date :