

October 18, 2007

Mr. L.K. Tripathy
Chief Secretary
Government of Tamil Nadu
Fort St. George
Chennai
Tamil Nadu

Dear Mr. Tripathy:

Tamil Nadu Irrigated Agriculture Modernization and Water-Bodies Restoration and Management (IAMWARM) Project

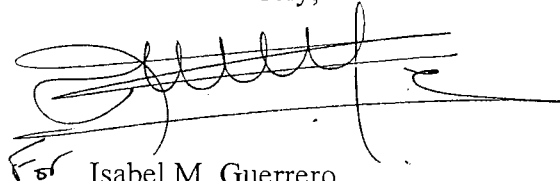
I would like to thank you, your colleagues from various departments and the Implementing Agencies for the very constructive meetings with the implementation support mission (August 24-30, 2007) for the Tamil Nadu IAMWARM project. The mission's key recommendations and the agreements reached during the wrap up meeting, which you chaired, are highlighted in the attached *aide memoire*. I would like to bring the following critical points to your attention:

1. ***Bifurcation of the Public Works Department:*** As you know, it was agreed during the negotiations (and subsequently reflected in the minutes) that the bifurcation would be completed by June 30, 2007. This has not occurred. We are concerned about the delay and trust that the GoTN will complete this long pending action by October 31, 2007. As you know, the setting up of a specialized professional workforce dealing with water and irrigation aspects in a water-scarce state like Tamil Nadu is crucial to fully realize the benefits of the project.
2. ***Project Staffing:*** It is also critical to have the staff responsible for project implementation in place at the earliest. I am pleased to note that GoTN has agreed to complete, by October 31, 2007, the actual staffing of the Multi Disciplinary Project Unit (MDPU), Water Resources Organization (WRO) cells, as well as the IAMWARM cells in the implementing line agencies by suitably qualified staff including those to be procured from the open job market.
3. ***Implementation Streamlining:*** The procurement of civil works and goods are proceeding at a reasonable pace in spite of initial teething problems. However, procurement of crucial consultancies has lagged behind and needs immediate attention to ensure that the project implementation proceeds in a streamlined manner.
4. ***WRO Bids.*** I would like to inform you that the Bank is currently looking into the WRO bids procurement related issue, and reviewing all information received. Discussions are under way between the Bank and the GoTN to help resolve this matter in a satisfactory way.

I thank you for your personal involvement and close monitoring of the project. I rely on your support to ensure that the issues raised above are urgently addressed. I too shall closely monitor this from my end as these are crucial to streamlining early project implementation. I am confident that the hard work of both the GoTN and the Bank teams will help this project indeed get off on the right track.

With regards,

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Isabel M. Guerrero', written over a horizontal line.

Isabel M. Guerrero
Country Director, India

Attachment: *Aide Memoire*

cc: Mr. Madhusudan Prasad, Joint Secretary (FB), Department of Economic Affairs,
Mr. R.P. Singh, Director (FB), Department of Economic Affairs, Government of India
Mrs. Gauri Chatterjee, Secretary, Ministry of Water Resources, Government of India
Mr. R.M. Mishra, Joint Secretary, Ministry of Water Resources, Government of India
Mr. L. Rynjah, Advisor, (WR) Planning Commission, Government of India

Mr. S. Rajeretinam, Secretary to Chief Minister, Government of Tamil Nadu
Mr. S. Audiseshiah, Secretary, Public Works Department, Government of Tamil Nadu
Mr. K.Gnanadesikan, Secretary, Finance, Government of Tamil Nadu
Mr. Surjit Choudhry, Secretary, Agriculture, Government of Tamil Nadu
Ms. Leena Nair, Secretary, Animal Husbandry and Fisheries, Government of Tamil Nadu
Mr. Vibhu Nayar, Project Director, IAM WARM Project, Government of Tamil Nadu
Mr. P. Raman, Engineer-in-Chief, Water Resources Organization, Government of Tamil Nadu

Tamil Nadu Irrigated Agriculture Modernization and Water-bodies restoration and Management project

**Implementation support/Supervision mission
Aide Memoire**

August 20-30, 2007

Project Data		Current Ratings and Flag		
		Summary Ratings	Last	Now
<i>Board Approval Date</i>	01/23/2007	<i>Development Objectives</i>		s
<i>Effectiveness Date</i>	04/09/2007	<i>Implementation Progress</i>		s
<i>Closing Date</i>	03/31/2013	<i>Project flags</i>		s
<i>Original Loan Amount</i>	US\$461.72 million			
<i>Amount Disbursed</i>	US\$25 million (5.41 %)			

A World Bank supervision mission comprising Rabih Karaky (Team Leader), Srinivasan Raj Rajagopal, (Water Resources Specialist), Nagaraja Rao Harshadeep, (Sr. Environmental Specialist), Shankar Narayanan, (Sr. Social Development Specialist), Sushil Kumar Bahl (Sr. Procurement Specialist), Mohan Gopalakrishnan (Sr. Financial management specialist), Jagdish Anand,(IT Specialist), R. Doraiswamy (PIM specialist), B.S. Sathe (Livestock specialist), and Sitaramachandra Machiraju (Agribusiness specialist) visited Tamil Nadu (August 20-24) to follow up on the implementation progress of the TNIAMWARM project. Manivannan Pathy (Sr. Agriculture specialist) visited Chennai (August 29-30) to continue discussions with the agriculture and horticulture departments.

The mission held a series of discussions with the MDPU and the different line departments, and undertook field visits to Coimbatore (PAP sub basin), Kanchipuram (Sathanur sub basin), and Villupuram (Varahanadhi sub basin) to interact with farmers, WUAs, and line department staff in the field, and to assess the physical condition of the PAP contour canal. The mission would like to thank the MDPU, WRO and all other implementing agencies for their hospitality and interaction with the mission and for organizing, facilitating, and participating in the field visits.

Major Issues

Bifurcation of PWD: The mission noted that no further steps have been taken towards completing the bifurcation of the PWD. The mission stresses that bifurcation is essential to set up a professional and specialized irrigation service delivery department. This is in line with the commitment made by GoTN during project negotiations and as reflected in the agreed minutes of negotiations where it is indicated that the bifurcation was to be made fully operational by June 30, 2007. *The mission was informed by the Secreary PWD that bifurcation would be completed by October 31, 2007*

Project cells: The mission was informed that problems of low capacity and lack of availability of staff are causing delays in the formation of the IAMWARM cells, particularly in the horticulture and agricultural marketing departments. Moreover, the mission expressed its concern to the lack of attention that the IAMWARM project was receiving from the horticulture department. In

addition to the problem of staff constraint there, the mission was told that there were other on-going projects in the state such as the large National Horticultural Mission activities. *The mission was informed that an officer (not at JD level as originally requested) had just been designated as a full-time nodal officer for the IAMWARM project.*

The mission suggested that shortages in staff may be addressed by contracting external candidates from the market, and observed that there may be opportunities to consider alternative implementation approaches involving partnerships with other entities to stimulate the critical horticulture and marketing activities under the project.

WRO cells: The mission also expressed its concern for the delay in setting up the WRO Cells essential for institutionalizing project implementation. The establishment and maintenance of three cells (IT, Participatory Irrigation Management, Training) are one of the institutional provisions agreed upon during negotiations and reflected in the project's legal documents, and agreed upon during the portfolio review meeting. The cells were to be established within thirty (30) days of the effective date of the project. (April 9, 2007). The three above cells, in addition to the IAMWARM cell are all critical in streamlining implementation on both capacity-building and physical investments. *The mission was also informed that orders to set up these cells and initiate staffing have been promulgated and that staffing would be completed by October 31, 2007.*

MDPU staffing & space: The mission has learned that the Government sanctions for MDPU posts have been issued and *that the selection for all the sanctioned posts would be completed by October 31, 2007.* In this regard the mission has noted that in order to meet the proposed increase in MDPU staff number, adequate space may be provided temporarily until the construction of the new office building. In this regard the mission stressed the need for accelerating the process for recruiting an architect/engineering firm for this purpose. The mission has worked closely with MDPU to finalize the EOI and TOR for engaging an Architect/Engineering consultant for the building design and procurement. The mission requests the concerned authorities to issue the request for expression of interest immediately.

Procurement

- The project implementing agencies have revised and modified their procurement plans. This would result in several of NCB packages to be now procured following Shopping method. These changes were discussed with the mission and comments have been provided. The mission requested the Project to forward the revised procurement plans to the Bank with appropriate justification for the changes. The Bank would review for any remaining comments, and no objection.
- There has been a significant delay in issuing the internal clearance for the procurement of computers by WRO. The Project informed the Bank that as the project does not have enough capacity to procure computers required for WRO and to be procured following ICB, they intend to use the services of ELCOT, the GOTN undertaking which is responsible for procurement of computers for GOTN requirement. The Project also clarified that ELCOT would follow the Bank Guidelines and use the Bank's SBD and will also follow all the procedures agreed by the project. The fee if any will also be funded by GOTN. In principle the Bank agreed but requested the Project to forward its proposal for review and formal no objection by the Bank.
- The Project informed that Agriculture Engineering Department was considering some changes in the method of procurement of Drip irrigation packages and also the packages for

construction of Farm ponds. The change is due to the subsidy to be paid to the farmers against these workers. The mission requested the Project to forward the detailed proposals giving appropriate reasons for the proposed changes to the agreed method of procurement for the Bank's review and no objection. *At the end of the mission, Principal Secretary Agriculture informed the mission that there will be no change in the method of procurement for the Drip irrigation packages.*

- The Project requested the Bank for their reaction to the GoTN proposal for inviting fresh prices from the bidders for the WRO packages, who submitted bids and have quoted very high prices, after modification in terms of payment. The Project was hopeful that by this method they will be able to obtain substantial reduction in prices. The Mission requested the Project to provide to the Bank the detailed analysis and the reasons in respect of each package where it considers that the prices are high. The Mission also requested the Project to inform the mode of advertisement adopted for these contracts, the list of firms who purchased the bidding documents and those who submitted the bids. This would enable the Bank to review the Project's proposal and decision will be conveyed soon after receiving the requested information and senior Bank management consultation.

- Other Consultancies

Monitoring and Evaluation: The mission was informed that 42 EOI for the Monitoring and Evaluation consultancy have been received and are currently under scrutiny for short listing. The mission indicated that it is very important that the process be expedited to the extent possible in order to get the baseline prepared prior to the large scale start of project activities. *Update:* The short list has been prepared and forwarded to the Bank for clearance. The Bank has since reviewed, requested and received additional clarification from MDPU to determine the nationality of the joint ventures in order to issue the clearance accordingly.

Topographic and Cadastral Survey: The mission was informed that 30 EOI have been received and are currently under scrutiny for short listing.

Third party technical examination of works: The mission advised the MDPU and WRO on the EOI and TOR for the proposed Consultancy on Technical Examination of Works. It was agreed that the MDPU would send the draft EOI, TOR and RFP on this Consultancy to the Bank for clearance at the earliest.

Information Management Systems: The mission suggests that the EOI for this work be cleared with the Bank and published immediately. In the meantime, the Bank is reviewing the RFP to ensure that the scope of work is clear to prospective consultants.

Financial Management

The progress on the financial management actions is considered satisfactory. The actions completed include (a) Budget provision by sub-basin has been made for all the departments and allocated to all divisions/ districts; (b) consent of the CAG has been obtained for external audit; however the CAG while providing its consent has expressed its inability to audit the Tamil Nadu Agriculture University (TNAU). It was agreed that TNAU will be audited by the Local Fund Auditor (LFA) and the MDPU will send the TOR and format of audit report to LFA for their consent by August 31, 2007; (c) The Internal Audit and Statutory Board (IA&SB) which was to carry out internal audit requested the Govt. to recruit additional staff to carry out the internal

audit; the Finance Dept has therefore suggested and approved that instead a private CA firm may be hired on a competitive basis to carry out the audit as per terms of reference to be approved by the Bank. The mission agrees with this approach and it was agreed that the firm will be contracted by December 31, 2007; (d) the finance cell in the MDPU is partially staffed with a Finance Specialist supported by two staff. The position of an accounts officer and 2 Accountants is yet to be filled in. The mission was informed that these positions will be filled in either on deputation or from the market by October 31, 2007; (e) the draft interim financial report for the period ended June 30, 2007 was shared with the mission and suggestions for improvement were provided. It was agreed that revised report will be submitted to CAAA and bank by August 31, 2007.

A half day workshop was held to disseminate the financial management aspects, especially the financial reporting and financial controls to the finance staff of the various line departments involved in the project. However staff from the WRO and Horticulture Depts did not participate in the workshop. It was agreed that the finance specialist will hold a similar workshop at district level to orient the district staff over the next 2 months and the Bank may provide technical support for these workshops.

Other Project Implementation Progress

- Participatory Irrigation management. The mission has worked closely with the MDPU and WRO counterparts to prepare the necessary documents for the proposed support organizations (SOs) to be contracted for the mobilization, establishment, and capacity building of WUAs. The mission recommends that the activity of finalizing the ToR of the Support Organization be given high priority and upon finalization of this document a meeting with all concerned WRO, MDPU and line department representatives used to clarify the vision of how the project intends to partner with the SO's in achieving project development outcomes. Once finalized these ToR should be shared with concerned District Collectors as MDPU seeks to involve them in the process of procuring SO services. Update: the project empowered committee has since sanctioned this consultancy.
- Cooum Sub-basin The mission participated in a multi-stakeholder Workshop on the Cooum Sub-basin on August 21, 2007 which discussed key issues in the Cooum Sub-basin and progress on the activities of the Cooum Sub-basin Technical Group that had been set up. A very informative draft Cooum Sub-basin Atlas was also released as part of the workshop. The mission appreciated the work done so far and recommended that a physical location be demarcated for a Cooum Sub-basin office, and methods evolved to improve focused structured stakeholder consultations (separately for issues in the catchment, urban and mouth) and outreach. The mission and GoTN also agreed that the Cooum Sub-basin would be a special case among the IAMWARM's project sub-basins that would require longer and well-structured consultation, planning, piloting and implementation. The mission also visited the Poondi Hydraulic Research Station to discuss rejuvenation of the Chennai Basin model that existed at the Station and to prepare proposals for model studies for specific actions being considered for the Cooum river.
- Contour Canal The mission visited the Parambikulam Aliyar Project and inspected the entire length of the Contour Canal. This canal had been originally included as part of the first year package but the engineering staff of the region raised doubts about the adequacy of measures proposed. GoTN has recruited a local expert and has constituted a small expert team to look into the issues involved. Some remedial works had been carried out in this canal during the previous Bank-assisted Water Resources Consolidation Project (WRCP). Substantial discussions were held during the visit in which the mission was accompanied

by the Engineer-in-Chief WRO, Adviser to GOTN, Project Director, Regional Chief Engineer and his entire senior staff. Deficiencies in the work carried out earlier were pointed out to them. The mission also noted the various lining experiments that are being carried out and indicated that such piecemeal approach was more harmful than fruitful. Importance of adequate measurements along the canal was emphasized. The mission was dissatisfied with the quality of the work carried out earlier.

- The problems associated with this canal can be summarized as: (i) seepage from the left bank of the canal throughout its length with some substantial leakages in certain reaches; (ii) rapid deterioration of the lining installed earlier due to poor design (no weepholes in a canal with towering mountains above it – hence no relief for pore pressures and subsequent damage to the lining; (iii) poor operation of the canal – rapid drawdown which is not permitted in lined canals – one of the engineers was recently trained in the United States Bureau of Reclamation and is now aware of this problem; (iv) huge trees growing on the right bank which is the natural mountain with a protected forest and the roots are so large that they simply break open the lining; (v) apparent lack of adequate cross-drainage measures in the original designs; (vi) piecemeal approach to solving the problems which has resulted in exacerbating the problems. The mission noted that adequate measurements are not being made to understand the seepage phenomenon in a scientific manner and requested the engineers to provide the mission with the original designs and a well-designed measurement program. This action needs to be completed by the Engineer-in-Chief and submitted to the Bank by no later than October 10, 2007. The Bank team will review these and advise further on future course of action. A separate memo is being issued on actions to be taken by the WRO in order to prepare sound engineering solutions and will be sent to WRO upon receipt of the original designs and the as-built drawings for the contour canal.
- SWaRMA The mission worked closely with GoTN on moving to operationalize the State Water Resources Management Agency (SWaRMA). The MDPU and WRO discussed progress on the draft Act for SWaRMA with the Bank mission. The mission indicated that it was critical to amalgamate the activities of the CE (Groundwater) that managed the State Surface and Groundwater Data Center and the CE (IWS) that managed the adjoining Institute for Water Studies to help the State develop a focal point on integrated water resources planning, allocation and management.

Agriculture and Horticulture: The mission discussed thoroughly the crop demonstration program with MDPU/Department of Agriculture, and noted that, in order for demonstration plots to be successful and serve their intended purposes, clear technical specifications for each demo crop should be developed and off farm inputs should be provided to the farmer, while he put in his labor. The project informed the mission that the government has taken a stand that demonstrations have been going on for too long as freebies, and do not translate into expansion of practices therefore the farmer should provide in addition to labor, parts of the inputs. The mission advises the MDPU/Department of Agriculture, that if they decide to proceed with their suggested approach, it is absolutely essential that farmers are aware of their responsibilities ex-ante, in order to avoid any misunderstanding/blame should there be a demonstration failure caused by lack of proper input application.

The mission noted that the horticulture program for the first year is primarily concentrated on area expansion with little demonstration taking place (one demonstration on high density planting). The mission suggested to MDPU/Horticulture Dept to consider expanding the demonstration activities (if not in the first year plan, then definitely in second year onward),

especially that the project, as is clearly written in the PAD, provides for participatory demonstrations in many possible horticultural activities such as mangoes, sapotas, amlas, tissue culture bananas, chillies, herbs, spices, and in INM/IPNM and organic farming to name a few. The demonstration program would provide an opportunity to further crop diversification and the adoption of new technologies in the state.

Animal husbandry Development

The mission has reviewed the activities under the Animal husbandry component. A detailed annex is attached summarizing all the discussions and findings. Three key issues are highlighted below:

Identification / Selection of veterinarians: The efforts by the project authorities to identify and select the required personnel (Unemployed vet graduates and/or retired vets) to run the new proposed 50 veterinary units for the first year of the program have not so far met with much success. Appointment of stockmen/ tock Supervisors, Para-vets is not likely to meet the same fate.

It is necessary that the project authority in collaboration with GoTN, find an early and satisfactory solution to this crucial and vital issue. Following suggestions are given to mitigate the problem:

- (a) Keep the selection for UVG at the central level with the project authority, after setting up a selection committee of representatives from the MPDU, Department of A.H. and Tamil Nadu Veterinary University.
- (b) Set up a Graduate Student Placement Cell in the Tamil Nadu Veterinary University to identify and procure talented and willing outgoing graduate students. Train them properly after graduation and before they are put up in UVG practice. This procedure is being regularly followed in IIT, IIM and several other institutions in collaboration with the private sector industry.
- (c) Since the UVG will be given performance based incentives for a limited period, he can be appointed on a contractual basis on terms that are different from the Government department employee, so that afterwards he does not make a demand for permanent placement in the Government service.

Market intelligence and tie ups: During appraisal, a need has been identified for improving awareness levels of farmers including market intelligence and tie ups. In the program prepared for the first year, the above 2 items (MI and tie ups) have not been widely incorporated. The mission was told that part of the information will be provided through the IT KIOSKS and a pilot on this as planned for the first year and has been initiated in PAP by TNAU Cards under the title e-Vellanmai). It is recommended that these should be identified and included in the second year of the program. Since milk is the major output from the program beneficiaries the major marketing-tie up could be arranged with the Tamilnadu Cooperative Milk Producers Federation (TCMPF) or private sector dairy industry in the state a forward contractual arrangement between milk producers and private sector which is now becoming popular in other states of India.

Program of fodder production on the Government Farms: It is proposed that an area of 40 ha with an outlay of about Rs 2.7 million will be used and developed for production of quality green fodder at the Government Farm at Manimuthar sub-basin for selling the fodder to the milk producers since there is a heavy demand for fodder and low availability. The mission advised that though at infant stages, this activity may be carried out at the Government farms, it should eventually be transferred to the users such as farmers' associations/milk producers' cooperative union in the district. In Gujarat, there is a scheme of fodder production on common grazing grounds owned by the village Panchayat lands. These lands are transferred on a long term lease to the dairy cooperatives that cultivate the green fodder and supply it to the milk producers on cost-basis.

Fisheries Development

Attached Annex provides detailed description of the discussions between the mission and the fisheries Department/MDPU about the development component. Two key points are listed here:

Monitoring of health status: This aspect has not been considered in the present program. It will be desirable that the Department of Fisheries of the state Government provide this service on a regular basis through their existing mechanism to the fish producers in the project.

Market Intelligence Service and Market tie ups These services are not included in the program. The information kiosks are being set up by the agriculture Department of the state Government. The Department of fisheries will provide the market intelligence service through these kiosks. It will be desirable that the service is provided by the Department of fisheries of the state Government in the project area from the 2nd year onwards.

Agriculture Marketing and Agribusiness Development:

The mission reviewed the activities under the agricultural marketing and Agribusiness Development component. A detailed annex reflecting the discussions is attached. Also attached are examples of draft TORs for Value chain analysis and Agribusiness specialist

The mission considers it would be useful if DAM develops a comprehensive strategy for increasing unit value realization of farm produce. Preparing Farmer Interest Groups/Commodity Groups for participation in local markets is a critical first step. Low cost high impact interventions like scientific post harvest handling, quality enhancement through product hygiene, standardization (grading/sorting) and local aggregation of produce must therefore receive top priority. MDPU/DAM may prepare marketing plan for select crops/commodities for the current year and initiate preparatory measures for piloting market support interventions well in time for second harvest season. This includes quick assessment of training needs of farmer interest/commodity groups and engaging support organizations for capacity building and handholding.

The mission held intensive discussions with MDPU/DAM on the procurement plan, and following recent discussions with the PD, the mission strongly recommends that the procurement plan will be approved subject to proceeding with no more than 50% of the plan proposed for storage godowns and drying yards during the current year after performing reality check of the ground situation and having in place a clear road map for empowering communities to assume management of infrastructure and cost of maintenance within a definite time frame.

MDPU/DAM would appropriately reallocate the savings from proposed plan towards softer elements of the project intervention like analysis of key value chains, trainings for DAM staff,

formation of commodity groups, preparing training manuals/materials, training of commodity groups in quality improvement/value addition/marketing, setting up collection centers, piloting market linkages, etc.

MDPU/DAM would arrange for orientation/training sessions to be provided to the local farmer/commodity groups on how to manage and maintain movable infrastructure like moisture meters, weighing scales, etc. before locating them at strategic locations with clearly defined catchment area within the respective river sub-basin. Support Organizations, being recruited under the project may also assist in the training program

Agri-Business Centers: Establishment of 9 Agri-Business Centers centers have been planned during the year 2007-08. The idea of MDPU in making Agribusiness Centers as fulcrum for farm and off-farm interventions is laudable. MDPU may develop a reliable service offering at these centers and build a sound business concept of Agribusiness Centers based on quick assessment of similar initiatives in private and community sectors. More importantly, the project needs to develop a strategy as to their ownership/management, investment structure, etc. The project may like to engage private sector and/or civil society organizations experienced in provision of farm extension, farm technology transfer and agricultural services to roll out these centers in the initial phase.

A model business plan and pilot Agri-Business Centers will be formulated in a few places during the current fiscal. In this connection, APC had advised MDPU to study alternate models of agri-service centers and agri-marts offering farm extension, input supply and output marketing support in different parts of the country for finalizing an appropriate business format for ABCs. The emerging agribusiness models include Covenant Center for Development's Gram Muligai Company Limited (Tamil Nadu), Indira Kranti Patham (Andhra Pradesh), South Indian Federation of Fisherman Societies (Kerala), Mahindra Shublabh (Tamil Nadu, Andhra Pradesh), Rallis Kisan Kendras (Madhya Pradesh), ITC E-Choupal (Andhra Pradesh, Madhya Pradesh), Tata Kisan Sansars (Uttar Pradesh, Haryana, Punjab) and DSCL Kisaan Hariyali Bazaars of (Haryana, Punjab).

Staffing Issues: The mission appreciates the initiative taken by MDPU to recruit agribusiness professional from open market. The specialist will provide necessary technical assistance and support formulation of agri-business strategy, coordinate establishment of Agri-Business Centers, develop business linkages with private/cooperative sector firms and mobilize investment support for downstream SMEs. Draft ToR for agri-business specialist have been shared with MDPU.

However, the mission also feels that there is a need to strengthen the staff complement supporting agricultural marketing activities and build their skills to resonate with community organizations on one hand and private sector on the other. Their exposure to emerging agribusiness models like Covenant Center for Development's Gram Muligai Company Limited (Tamil Nadu), Indira Kranti Patham (Andhra Pradesh), South Indian Federation of Fisherman Societies (Kerala), Mahindra Shublabh (Tamil Nadu, Andhra Pradesh), Rallis Kisan Kendras (Madhya Pradesh), ITC E-Choupal (Andhra Pradesh, Madhya Pradesh), Tata Kisan Sansars (Uttar Pradesh, Haryana, Punjab) and DSCL Kisaan Hariyali Bazaars of (Haryana, Punjab) would be helpful.

Value Chain Development of Key Commodity Steps: The mission feels that it would be useful for the project to identify a few key commodity sectors and strategically intervene at various levels of value chain that creates, preserves and consolidate value in favor of Farmers. For this MDPU may initiate steps to organize studies for value-chain analysis in key sectors. Needless to emphasize the reports should help clearly define project interventions, private partnership opportunities and

potential impact on farm incomes. Draft ToR for consultancy on value chain analysis to develop agricultural marketing and agribusiness strategy together with repertoire of project interventions have been shared with MDPU.

Commodity Groups/Farmer Interest Groups and Agricultural Marketing Plan: The Project envisaged forming farmer interest groups around predominant crops/commodities in WUA areas for dovetailing agricultural marketing services and agribusiness promotion. The Project may obtain the support of Civil Society Organizations (CSOs) in forming Commodity Groups and developing sub-basin wise Agricultural Marketing Plans for the current year based on the cropping area and prevailing yield patterns. Such plans will initially focus on need based agri-input supply; farm level quality addition (cleaning, grading, sorting); commodity aggregation; marketing facilitation with local traders and processors and buyer tie-ups in private sector.

Agreed Actions

Action	Timeframe	Responsibility
Completion of PWD Bifurcation	October 31, 2007	Secretary, PWD
Staffing of all IAMWARM Cells	October 31, 2007	All Implementing Agencies
Staffing of WRO Cells	October 31, 2007	WRO
MDPU Staffing	October 31, 2007	MDPU
Improve targeting and roll-out of agriculture/ horticulture demonstration plots	for Second Year Sub-basins and after	Agriculture/Horticulture Dept MDPU
Streamline procurement (frequent communication to reduce delays, more oversight on procurement documents by agencies and MDPU, quicker Bank response)	Henceforth	MDPU and World Bank
SWaRMA Act Drafted	October 31, 2007	MDPU, WRO
Financial management actions	As indicated in this AideMemoire	MDPU

SUPERVISION MISSION TN IAMWARM PROJECT

Comments of Dr B.S.Sathe Livestock Consultant on the Livestock sub-component of the project.

1. Introduction:

As per the TOR given to me by FAO (TCIP) vide letter dated 13th August 2007, I visited Chennai from 20-25 August 2007 to join the WB/FAO supervision mission to review the Livestock sub-component of the above mentioned project. The plans/programs of the component prepared by the MPDU for the first year were discussed in detail with Dr. R Thiruthalianathan, member (Animal Husbandry) MDPU TN IAMWARM Project office and Dr R Ramesh of the Directorate of Animal Husbandry GoTN. The main discussion was on the proposed technical inputs, physical and financial programs to be implemented for the first year, suggestion to implement the programs in the second year and bench marks for the sub-component.

My major observations/comments are given below.

2. Objectives:

The main objective is to improve the production potential livestock in the sub-basins through:-

- (a) Increased availability of green and other fodder by bringing more area under fodder cultivation, since more irrigation facilities will be available from the project.
- (b) Improving delivery of animal breeding and veterinary/ animal health services
- (c) Improving awareness, knowledge level and skills of the livestock farmers in the sub-basins, including market intelligence and tie ups.

Under the present project, funding will be provided to achieve above mentioned objectives. This will primarily include infrastructure facilities for on-farm demonstration of fodder production through provision of certified seeds in plots of selected and willing farmers for production of HYV grasses like Co3 (hybrid Napier), Kollukkatai (buffaloe grass) and stylo, in addition to fodder like cultivated green maize and sorghum (Cholam) and hedge Lucerne. At the end of the project, it is expected that 6500 ha area will be brought under improved fodder production. This will be possible because the main project on irrigation and water conservation in ponds will provide the required input of water for cultivation of quality fodders. The project also envisages providing quality inputs through better quality semen for insemination of cows and buffaloes, improved veterinary and animal health cover through establishment of veterinary units manned by self employed veterinary practice through encouraging unemployed veterinary graduates. Funds will also be provided for extension education of the farmers and workers to improve their knowledge and skills to improve production and delivery of services.

3. Selection of area for the program for first year:

Following nine sub-basins have been identified for providing infrastructure in the first year:

- Varahnadhi
- Uppar velar
- South Vellar

- Pambar
- Manimuthar
- Kottakkaraiyar
- Arjunanadhi
- Aliyar
- Palar

4. Location of new veterinary Units.

In each subdivision, villages have been identified. Places for locating the Veterinary Units have been identified on the basis that the new unemployed veterinary graduate will have an operational area of villages situated in about 10-15 km radius where the newly established graduate will be able to operate and earn a reasonable income from the veterinary practice. The concept followed for selection/and location of veterinary units is satisfactory.

5. Physical programs:

Keeping in view the overall guidelines provided in the bank appraisal report, physical programs have been prepared by the project authority for the first year for the 9 sub-basins. They include the following:-

The main activities/programs and inputs to be provided under each activity for 9 subdivisions in the first year are given in Annexure 1 (attached). They are as under:

- Establishment of sub-basin Veterinary Unit
- Infrastructure in Institutions
- Fodder development
- Infertility cum Health Care camps
- Supply of mineral mixture (in a selective and need based for animals showing recurring problems of infertility, lack of appetite, mineral deficiency syndromes etc)
- Information Education and communication campaigns(IEC)
- Training and extension education of farmers and field workers.

Some of the programs of providing basic infrastructure facilities which were initially proposed to be taken during the second year have now been advanced to the first year to recover the time lost so far in the first year. This is reasonable and can be accepted since the basic infrastructure has to create as early as possible so that the overall targets set for 5 years can be achieved.

6. Program of fodder production on the Government Farms:

It is proposed that an area of 40 ha with an outlay of about Rs 2.7 million will be used and developed for production of quality green fodder at the Government Farm at Manimuthar sub-basin for selling the fodder to the milk producers since there is a heavy demand for fodder and availability is less. It is felt that a possibility of utilizing a part of the land for fodder demonstration and fodder seed production for supply to the farmers. It is felt that initially this activity may be also taken up in this farm. However, eventually on full development of the activity, it should be transferred to the users such as farmers' associations/milk producers' cooperative union in the district. In Gujarat, there is a scheme of fodder production on common grazing grounds owned by the village Panchayat lands. These

lands are transferred on a long term lease to the dairy cooperatives who cultivate the green fodder and supply it to the milk producers on cost-basis.

7. Key elements to achieve the desired project objectives and project benefits.

The envisaged project benefits are increased milk production, improved reproductive efficiency of dairy animals and improved animal health.

The crucial and important inputs which will have a significant impact are as under:-

- (a) ensuring timely supply of good quality certified seeds of high yielding varieties of fodder crops and fodder grasses and developing a systematic and suitable fodder cultivation calendar for different agro-climatic regions of the sub-basins and efforts to conserve the fodder so that it is available during the scarcity periods.
- (b) providing high quality cattle and buffalo semen of elite/ pedigreed bulls and ensuring timely delivery of AI service at the farmer's doorstep.
- (c) adopting proper animal healthcare measures by following suitable and timely vaccination schedules, deworming of young calves etc.

Extension education of farmers and their willingness to cooperate in all above mentioned areas will play an important role and a key to the success of the project.

It is recommended that the project authority should develop suitable management plan for delivery systems and supply of inputs in above mentioned areas, in consultation with the A.H. Department and Veterinary University of Tamil Nadu and guide the field workers and farmers to adopt sound management practices. The authority should design formats and encourage farmers to keep records on fodder cultivation and usage, animal breeding (insemination, conception and calving, problems of conception) and health cover (vaccination, de-worming, mortality)

8. Financial requirements:

The financial requirements based on the proposed units and unit rates have been prepared for each of the items and activities mentioned in the above paragraph for the first year of the program. They are given in Annexure I. I have discussed the issues with the assigned technical authorities of the project and the A.H. Department and have found them to be satisfactory. The total financial requirement for the first year for 9 selected sub-basins works out to Rs 42.1717 million. The sub-basinwise outlay is given in the Annexure II. It will be seen that this outlay is more than the previous estimated figure of Rs 26.26 million. The difference is mainly because some of the programs and activities of the second year have been advanced to the first year, as explained in the previous paragraph.

9. Technical specifications for purchase of major items.

The major technical equipment to be purchased for the program is Semi-Auto Analyzer with a total cost of Rs 60 lakh (20 units, each costing Rs 3 lakh). The technical specifications prepared for the item for inviting bids are satisfactory. These analyzers can be used to

estimate micro nutrients, chemicals , minerals, enzymes etc in the blood, tissue, urine samples etc of animals and can be a useful tool for diagnosis of diseases, particularly for differential diagnosis for confirmation of a particular infective agent. They can be used as a useful tool in the studies to survey the problems of mineral and other nutrient deficiency syndromes. However the equipment needs to be carefully and selectively used since the chemical/ reagents required for analysis are costly. The user veterinarians will have to suitably trained. The binocular microscopes and other items required in the program are routinely purchased and used and the A.H. Department has the desired technical specifications available with it to purchase them.

10. Preparation of physical and financial requirements for Year 2:

Programs and physical/ financial requirements for the second year have not so far been prepared because the villages situated in the sub-basins for the second year have yet to be identified. It is expected that the programs for A.H. component for the second year will be identified and quantified by the end of December 2007.

11. Identification / Selection of unemployed veterinary graduates (UVG):

The project is supposed to support the improvement of veterinary services by encouraging entrepreneurship among the unemployed veterinarians (UVG). The efforts done by the project authorities for identification and selection of the required personnel (UVG) to run the new proposed 50 veterinary units for the first year of the program have not so far met with much success. The requirement for first year is 50 UVG and the total requirement for the entire project period of 5 years is 137 UVG.

The project authorities have prepared the estimates of monthly income which can be earned by the UVG. The estimates are based on the professional fees to be received from the farmers and some built-in performance based incentives to be provided (on tapering basis) to the UVG by the Department of A.H. The criteria used for performance based incentives are services given by UVG for artificial insemination of animals , pregnancy diagnosis and calves born in the area of jurisdiction of the UVG. These estimates show that the UVG can have a net earning of about Rs 9092 per month which can increase to Rs 13501 per month in the second year and Rs 18352 per month in the 5th year as more animals are covered for the service. This may vary from region to region and will depend on availability of high yielding quality animals with farmers and their willingness to pay for the services. The UVG will also require about 2-3 years to establish his name and reputation in the area which is linked to the efficiency in services provided by UVG. Therefore, at least in the initial period of 3 years , some financial support to UVG will have to be provided . The initial monthly income for a fresh UVG may work out to about Rs 6000 per month. It is also pertinent to note that, at present, the fresh veterinary graduate employed by the GoTN receives a gross salary of about Rs 14800 per month.

It is understood that in order to identify and select UVG for the given project, local district collectors were requested to get the list of UVG from the local employment exchanges, interview the candidates and select the willing candidates. So far, call letters for interviews were sent to 108 UVG but only 2 have responded favorably. It appears that most of the interviewed UVG want an assured payment of a professional fee of about Rs 5000 per month from the project authority/ state Government in addition to the fees to be collected from the farmers and built-in incentives in the scheme. They are also not willing to sign a bond to

serve for a minimum period of 2 years which is the condition reportedly stipulated for selection

It appears that the response from retired veterinarians is also not encouraging. Appointment of stockmen/ Stock Supervisors, Para-vets is also not likely to meet with much success. They are supposed to do only A.I and first aid work and are not permitted to undertake treatment with patent drugs and surgical operations of animals. Moreover, it is understood that in some areas, farmers have insisted that the service should be provided only by the veterinary graduates and not by the other above mentioned functionaries.

It is necessary that the project authority in collaboration with GoTN, find an early and satisfactory solution to this crucial and vital issue.

Following suggestions are given to mitigate the problem :-

- (d) Instead of getting the list of UVG from employment exchanges and requesting the collectors to interview and select the UVG, keep the selection at the central level with the project authority, after setting up a selection committee of representatives from the MPDU, Department of A.H. and Tamil Nadu Veterinary University. A possibility of walk-in-interviews after issuing an advertisement in leading news papers of Tamil Nadu can also be considered.
- (e) Set up a Graduate Student Placement Cell in the Tamil Nadu Veterinary University to identify and procure the talented and willing outgoing graduate students. Train them properly after graduation and before they are put up in UVG practice. This procedure is being regularly followed in IIT, IIM and several other institutions in collaboration with the private sector industry.
- (f) Since the UVG will be given performance based incentives for a limited period, he can be appointed on a contractual basis on terms that are different from the Government department employee, so that afterwards he does not make a demand for permanent placement in the Government service.
- (g) A professional incentive of about Rs 4000 to 5000 per month may be considered for an initial period of 3 years so that the UVG is assured of getting an income of about Rs 10000 to Rs 11000 per month which will encourage UVG to take hard work to establish the practice for overall success of the project.

12. Market intelligence and tie ups:

During appraisal, a need has been identified for improving awareness levels of farmers including market intelligence and tie ups. In the program prepared for the first year, the above 2 items (MI and tie ups) have not been incorporated. It is recommended that these should be identified and included in the second year of the program. Since milk is the major output from the program beneficiaries the major marketing-tie up could be arranged with the Tamil Nadu Cooperative Milk Producers Federation (TCMPF) or private sector dairy industry in the state a forward contractual arrangement between milk producers and private sector which is now becoming popular in other states of India. Discussions can be held by project authorities with suitable institutions and market tie up established from Year 2.

The market intelligence service for milk can also be set up by the project authority in collaboration with above mentioned institutions with whom market tie ups will be made by

the milk producers. The project authority will essentially play a role of an initiator and a guide to producers to set up the tie up arrangements for their produce. It is the milk producers themselves who have to take an interest in such tie ups.

13. Identification of bench mark parameters for A.H. program:

On the basis of discussions with the two concerned representatives of the MPDU and Dept. of A.H., the following bench marks are identified and proposed for the A.H. programs. The main considerations given are that (a) the bench mark should be useful (b) it should be practical and (c) it should be feasible to obtain records under the existing field conditions .

The proposed bench marks are:

- a) For Animal Breeding efficiency:
 - i. Number of inseminations done
 - ii. Number of inseminations per conception.
 - iii. No of inseminations per calf born
- b) For Feed and Fodder:
 - i. Area covered under fodder cultivation
 - ii. Fodder productivity (Fodder production per unit area on sample basis)
- c) For Animal Health:
 - i. Mortality percentage in female calves below 2 months of age
 - ii. Incidence of major contagious diseases in the project area
- d) for milk production enhancement
 - i. Milk production in the project area (on the basis of sample studies as are conducted by the Department of A.H./ Dairy Development GoTN).

SUPERVISION MISSION TN IAMWARM PROJECT

Comments of Dr B.S.Sathe Consultant on the Fisheries sub-component of the project.

1.Introduction:

The fisheries component of the project was discussed in detail with Mr. S.N. Balasingh member(fisheries) MPDU and Mr. T.K. Srikaman, Inspector of fisheries of the Directorate of Fisheries GoTN. The main discussion was on the proposed technical inputs, physical and financial programs for the first year, suggestion to implement the programs in the second year and bench marks for the sub-component.

Major observations/comments are given below.

2.Objectives:

The major objective is to increase production of fish and provide higher income and employment opportunity to the fishermen community in the sub-basins through intervention in the inland (fresh water) fish production.

The other objectives are (a) to make available quality fish seeds throughout the year for stocking in the irrigation tanks (b) demonstrate better methods of marketing fish through model Kiosks, (c) popularizing ornamental fish production as a commercial crop and (d) increased fishing efficiency by providing suitable crafts and gears for harvesting the fish from ponds and inland reservoirs.

It is estimated that the demand for good quality fresh water aqua-culture fish seed in Tamil Nadu is about 232 million per year while the availability is only about 160 million. With a view to meet the need for supply of good quality fish seed to the farmers in the sub-basins of the project, it is proposed to establish 2 fish seed hatcheries in which quality fish seed of carps (mainly Rohu, Katla and Mrigal) will be produced to supply to the farmers. This will be a useful facility to supply quality input which is already in short-supply. Fingerlings in advanced stage of growth produced and reared in the seed hatchery will be provided to the fish producers so as to obtain a faster growth.

3. Selection of sub-basins for the first year:

So far, 9 sub-basins have been identified for providing support under the project and DPRs have been prepared. Physical and financial requirements for identified basins have been worked out. Three more sub-basins are planned to be included by December 2007.

4. Identification and Plans for sub-basins for the second year:

Plans and DPRs for another 14 sub-basins are being proposed to be taken up in the 2nd year. The sub-basins have yet to be identified. In all, 63 sub-basins are proposed to be covered in 5 years under the fish production.

5. Physical program for the first year:

Following 11 components have been identified:

- Aquaculture in farm ponds primarily owned by the farmers
- Aquaculture in irrigation tanks by establishing fish seed banks
- Fish seed rearing cages as a supplementary program to obtain more fish seed.
- Ornamental fish culture
- Improvement in Government fish seed farm
- Supply of fishing implements (gears and nets) to farmers
- Kiosks for demonstration and to encourage clean/hygienic marketing of fish
- Vehicle hire charges for extension education work
- Documentation
- Information, education, communication, capacity building of fish producers and field workers
- Support to IAMWARM Project Cell in Head Office.

Number of units under each of the above mentioned activity, proposed quantities, unit costs and financial and operational costs have been worked out. They are given in Annexure I.

6. Financial Requirement for the first year.

In most components where the users are involved in fish production, it is proposed that their contribution will be approximately 10% of the project cost, which will be considered in lieu of their land where the project/activity will be taken up. Remaining 90% of the project cost will be provided by the project.

The physical numbers (quantity) and financial requirement for each of the above mentioned component has been worked out. I have discussed them with the technical representatives of the project and the Government. They are considered to be satisfactory. The total financial requirement for first year (2007-08) works out to Rs 31.367 million. The details are given in annexure II.

7. Technical specifications for purchase of major items.

There are no major costly items requiring technical specifications for purchasing them. Most of the items are being purchased on a regular basis by window shopping by the Department of fisheries GoTN. Construction of farm ponds of farmers is done by the Agricultural Engineering Department. Civil work construction for Government fish seed farms will be undertaken by the PWD of GoTN.

8. Monitoring of health status:

This aspect has not been considered in the present program. It will be desirable that the Department of Fisheries of the state Government provide this service on a regular basis through their existing mechanism to the fish producers in the project.

9. Market Intelligence Service and Market tie ups:

These services are not included in the program. The information kiosks are being set up by the agriculture Department of the state Government. The Department of fisheries will provide the market intelligence service through these kiosks. It will be desirable that the service is provided by the Department of fisheries of the state Government in the project area from the 2nd year onwards.

10. Identification of bench mark parameters for Fisheries program:

On the basis of discussions with the two concerned representatives of the MPDU and Dept. of Fisheries GoTN, the following bench marks are identified and proposed for the Fisheries programs. The main considerations given are that it should be useful practical and feasible to obtain records under the existing field conditions .

11. The proposed bench mark criteria are:

- (i) Increase in the area covered for fish production
- (ii) Increased productivity of fish per unit area
- (iii) Increased income from fish production

TNIAMWARM - Terms of Reference for Consultancy on Value Chain Analysis for supporting Agricultural Marketing and Agribusiness Activities (Draft)

Background

The Tamil Nadu Irrigated Agriculture Modernization and Water-Bodies Restoration and Management (TNIAMWARM) Project is being implemented by the Government of Tamil Nadu with the assistance of International Bank for Reconstruction and Development (IBRD)/International Development Association (IDA) to the tune of US\$ 500 million equivalent with the objective of improving irrigation service delivery and enhancing productivity of irrigated agriculture in a river basin/sub-basin framework. The project pays particular attention to agricultural intensification and diversification; productivity improvement through introduction of improved technologies; post-harvest handling, agricultural marketing and agro-processing to increase the overall productivity of water and improve farm incomes.

The project implementation arrangements provide for organizing Farmer Interest Groups (FIGs) and Commodity Groups (CGs) that are strategically linked to multi-service Agri-Business Centers (ABC's) located cluster levels. *ABCs are critical investments in the scheme of things as they are intended to provide technology and market interface for FIGs/CGs and serve as rural economic nodes for engaging public agencies and private sector firms.* ABCs will help participation of farmers in value chain framework and achieve market coordination with better bargaining power. The Project will focus on strengthening value chains of specific crop/commodity sub-sectors that are of strategic importance. Emphases will be placed on moving the farmers up the value chain by creating and preserving value primarily through quality addition, improved post harvest handling, output aggregation and agro-processing. It will also secure upstream and downstream links for farm holders in each of the value chains by promoting and engaging small and medium agribusiness enterprises (SMEs). The Project will establish an Agri-Business Development Facility (ABDF) to support these initiatives.

Scope of Work

It is propose to engage consultant(s) for helping the project in selecting strategic crop/commodity sub-sectors and identify key project interventions through rigorous value chain analysis. The study will examine each stage of value chains of chosen strategic sub-sectors and identify key players to analyze their roles influencing market dynamics. The focus of analysis will be on business environment; market practices and irregularities; terms of trade and incentive structures; entry barriers; etc. The study will make estimate of market size, demand patterns, distribution of value along the value chain, synergies between different levels, main drivers of cost and quality in the sectors, international comparisons of cost, and quality and variety of products. SWOT analysis of each sub-sector will throw up key support activities that can enhance growth or remove bottlenecks in the value chain. Cross cutting issues like access to finance, access to infrastructure, contracts enforcement and standards compliance will also be analyzed to identify emerging opportunities.

Selection of sectors/value chains: The following criteria may be applied to identify the key crop/commodity sectors for detailed analysis:

1. *Primary criteria:* Current size of domestic and international market, current levels of production, demand-driven sectors with significant potential for future growth, potential for downstream SMEs and leverage comparative advantage of Tamil Nadu.
2. *Secondary criteria:* Maximum value creation nearer the producer level, potential social dimensions (employment, etc.), potential to benefit from extant agricultural policy, low capital investment with relatively high impacts, ready access to crop technology, access to markets/international demand, preparedness to meet global standards and scarce existing market data or information.

However, study of those crop/commodity sectors may be avoided that have already been reviewed in depth by other similar studies for Tamil Nadu in recent past in order to avoid duplication and redundancy.

The study will entail desk study, field visits, stakeholder interviews and analysis. Stakeholder interviews will require intensive interactions with the MDPU, Agriculture, Horticulture, Livestock, Agricultural Marketing, Agricultural Engineering Departments, Tamil Nadu Agricultural University, NABARD, major commercial banks, investment agencies (TIIC, SFAC), Trade Associations (CII, FICCI), commodity market intermediaries, traders, processors in private and/or cooperative sectors, retail chains, etc.

Deliverables

The Consultant will provide an analytical report along with crisp recommendations and lay out a detailed plan addressing the following key points

- a. Selection of strategic crop/commodity sub-sectors for support under TNIAMWARM, together with value creation opportunities particularly in agricultural marketing and agri-business sectors
- b. Concise actionable interventions¹ with project resources that maximize value nearer the producer end of the agricultural value chain
- c. Promotion of upstream and downstream investments (both hardware and software elements) in short and medium terms to improve competitiveness of chosen sub-sectors
- d. Co-production models/options, relevant for strategic sub-sectors, for negotiating strategic tie-ups with large buyers, processors, agri-export firms and retail chains
- e. Identify demand based technical assistance requirements and sourcing options for vertical coordination in strategic sub-sectors
- f. Potential leads for partnerships from private/cooperative firms for engaging in serious value chain coordination with the project beneficiaries

Time Schedule: 60 working days from the date of signing contract.

Qualification and Experience: (the team/individual should have the following)

- Advanced university degree, preferably an MBA or equivalent, in agri-business, rural management, agricultural marketing, food science/technology/engineering, etc
- At least ten years experience in agribusiness development, agro-processing, supply chain development for fresh fruits, vegetables and flowers or agricultural export promotion.

¹ Such interventions can be considered as actionable as those that can reach scale within a short period of time requiring reasonably low investment, yet with potentially significant impacts at household level giving due consideration to institutional capacity of implementing agencies, community preparedness and current level of technology.

- Understanding of various business models currently used in agribusiness together with sound commercial knowledge and up-to-date knowledge of operating parameters, capital costs, and market trends.
- Familiar with statistical analysis and sampling techniques
- Prior experience of carrying out similar assignment
- Experience in private sector would be an asset

Payment schedule

- 10% upon signing of contract
- 30% upon submission of draft report
- 60% upon submission and acceptance of final report

Confidentiality Statement

All data and information received from MDPU for the purpose of this assignment are to be treated confidentially and are only to be used in connection with the execution of these Terms of Reference. All conclusions & recommendations are for MDPU, TNIAMWARM consideration only. All intellectual property rights arising from the execution of these Terms of Reference are assigned to MDPU. The contents of written materials obtained and used in this assignment may not be disclosed to any third parties without the expressed advance written authorization of the MDPU.

Instructions to Bidders

Qualified bidders are requested to submit four copies of a concise proposal not to exceed 8 A4 size pages (excluding CVs) directly to MDPU, TNIAMWARM. Proposals should include the following information:

- A description of the approach to the assignment that demonstrates an understanding of the objectives and desired outcomes of the project in the context of the project area.
- A summary of relevant expertise and experience implementing workshops or training programs similar to those outlined in this TOR.
- A management plan cum work plan for the entire assignment.
- Bio-data for all consultants who will take part in the proposed TA intervention.
- A detailed budget including the daily rates, reimbursable expenses, lump sum items, and any other budget information necessary to justify proposed expenditures.

**TNIAMWARM - Terms of Reference for Recruitment of Agribusiness Specialist
at Multi-Disciplinary Project Unit
(Draft)**

Background

The Tamil Nadu Irrigated Agriculture Modernization and Water-Bodies Restoration and Management (TNIAMWARM) Project is being implemented by the Government of Tamil Nadu with the assistance of International Bank for Reconstruction and Development (IBRD)/International Development Association (IDA) to the tune of US\$ 500 million equivalent with the objective of improving irrigation service delivery and enhancing productivity of irrigated agriculture in a river basin/sub-basin framework. The project pays particular attention to agricultural intensification and diversification; productivity improvement through introduction of improved technologies; post-harvest handling, agricultural marketing and agro-processing to increase the overall productivity of water and improve farm incomes. The project implementation arrangements provide for organizing Farmer Interest Groups (FIGs) and Commodity Groups (CGs) that are strategically linked to multi-service Agri-Business Centers (ABC's) located cluster levels. ABCs are expected to provide technology and market interface for FIGs/CGs and serve as rural economic nodes for engaging public agencies and private sector firms. In order to give market orientation to farmers and strengthen agriculture value chains by promoting small and medium enterprises (SMEs) in agribusiness, the project seeks to establish an Agri-Business Development Facility (ABDF). The facility will, *inter-alia*, work on (i) increasing access to finance, (ii) increasing access to business development services, and (iii) improving the business legal, and regulatory environment.

These Terms of Reference (ToR) are for hiring the services of Agribusiness Specialist to support MDPU.

KEY RESPONSIBILITY AREAS: The position of Agri-business Specialist will have the following six key responsibility areas:

1. *Strategic Directions:* The Specialist will support MDPU is providing strategic directions for agricultural marketing and agri-business component of TNIAMWARM. This will include

- Prepare strategies for the agribusiness development and coordinate project activities with other similar projects/schemes implemented in the project area
- Support various departments to formulate annual plans and synchronize with the objectives of agribusiness development strategy
- Help identify focus crops and commodities and propose strategic interventions, under the project, along the various stages of value chain to build national comparative advantage

2. *Policy Development:* MDPU will seek the help of Agribusiness Specialist to help GoTN build enabling environment for promoting investments and international competitiveness of the sector

- Organize sectoral studies and prepare assessment reports on policy and regulatory environment affecting agribusinesses, particularly SMEs

- Maintain comprehensive database, supporting the policy-making role, broadly covering trends in spatial and sectoral investment flows, banking support, yield data, production volumes, market statistics, etc.
 - Maintain close liaison, organize workshops/conclaves with investment promotion agencies, banks, trade bodies, industry associations and farmer organizations to provide periodically inform policy formulation efforts.
3. *Agri-Business Centers for enhancing participation of producers in local markets:* The Specialist will engage major part of her/his time on rolling out Agri-Business Centers across the project areas and enhancing market participation of farmers in local markets
- Draft business plans for Agri-business Centers and propose implementation plan for setting up such centers across the project area in a time bound manner
 - Develop strategies for ABCs to strengthen ongoing relationships of producers with local markets and ways to address constraints/opportunities
 - Leveraging the strength of producer organizations, help ABCs engage intermediaries to realign incentive structures and seek to alter terms of trade
 - Support ABCs in reaching producer organizations with reliable market information & extension systems
 - Facilitate development of grading standards and arrange community level technical assistance through ABCs for quality addition activities by producers, particularly in post harvest handling stage
 - Encourage producers to actively seek use of accredited grading and standardization facilities to address quality consistency, reliability and tracability concerns of large buyers, thereby create unique identity of ABCs in local markets
4. *Promoting private participation and value chain integration:* Conscious efforts will be made to create value through vertical coordination
- Develop repertoire of co-production models (contract farming, contract buying, etc.) with large firms for community-public-private partnerships and identify scalable approaches for including producers in agricultural value chains
 - Negotiating bulk contracts with large buyers in spot markets and explore alternate routes to improve market access and producer links for broader, mutually beneficial ties
 - Help producers, buyers, processors, exporters and other partners to identify and create opportunities for value chain integration improving their competitiveness and benefits
 - Promote new private and community based enterprises, particularly SMEs, involved in processing, packaging, storage, transportation and other pathways by which value may be added to basic agricultural commodities and products
 - Identify appropriate technical assistance sources and assist in the commodity procurement and mobilization process
 - Support migration into Good Agricultural Practices and EUREPGAP regimes by producers in a few basins/sub-basins that can be potentially linked to nearby agri-export zones
5. *Mobilizing investment support:* The specialist will help build enabling environment for addressing access to investment/finance sector from institutional sources
- Enlist support of accredited research and consultancy firms to help entrepreneurs develop business plans and bankable projects in agribusiness sector

- Facilitate an formal understanding with commercial banks, Tamil Nadu Industrial Investment Corporation, Small Farmer Agri-business Consortium and other private equity/venture capital firms to support value chain development activities
- Support developing a consortium with business associations, technology institutions, banks and development agencies/projects for promoting investments in agribusinesses taking advantage from developments in retail and agri-export sectors

6. *Technical assistance for Project Implementation:* The Specialist will provide technical assistance to critical aspects of project implementation

- Assist Support Organizations to develop appropriate capacity building and knowledge enhancement materials in the field of agricultural marketing & extension, agro-processing, value chain development, etc. for community level trainings
- Develop a pool of resource persons to provide handholding support to sub-basin level project staff to initiate agri-business development activities
- Document best marketing practices and field innovations and design scaling up strategies across the project area
- Help design monitoring and evaluation framework for reporting periodically the progress under project in aspects related to agribusiness sector

REPORTING RELATIONSHIPS: The Agribusiness Specialist will report to Project Director, Multi-Disciplinary Project Unit of TNIAMWARM. S/he will work with Marketing Consultant, other project staff and departmental staff of Agricultural Marketing, Agriculture, Horticulture, Livestock and Animal Husbandry Departments. Likewise, the Agribusiness Expert will maintain close liaison with Support Organizations, Civil Society Organizations, private and cooperative sector bodies, trade and industry associations.

KNOWLEDGE AND EXPERIENCE: Advanced university degree, preferably an MBA or equivalent, in agri-business, rural management, agricultural marketing, food science/technology/engineering, etc. with a minimum five years post qualification experience in private or cooperative sectors in agribusiness development, agro-processing, supply chain development for fresh fruits, vegetables and flowers or agricultural export promotion. Key programmatic knowledge in organizing farmer groups/producer associations, farm livelihood promotion, business development services, contract farming, developing market linkages for small producers, and building capacity of line departments, support organizations will be an advantage. Sound commercial knowledge and up-to-date knowledge of operating parameters, capital costs, and market trends in agri-business sector a definite plus.

COMMUNICATION SKILLS: Must possess excellent written and verbal skills in English and Tamil.