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August 02 , 2012

Dear Mr. Aoki,

Subject **Project: Increasing Agricultural Productivity via Private Sector Investment in Mozambique Millennium Villages (MMV) and Millennium Village (MV) Chibuto -Submission of the 2011 Report from January – December 2011.**

Please find enclosed the 2011 Narrative Report, as well as Provisional Financial Statement from January – December 2011, for the *Increasing Agricultural Productivity via Private Sector Investment in MMV and MV Chibuto* Project.

I would like to take this opportunity to sincerely thank for the support that has been provided by your company in the implementation of this Project. The successful operation of this Project is important to achieve the MMV objectives and therefore the Millennium Development Goals.

Yours Sincerely,

Jose Macamo
Deputy Country Director, a.i.

Mr. Yuichi Aoki
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United Nations Development Programme

And

Ministry of Science and Technology

Increasing Agricultural Productivity via Private Sector Investment in Mozambique Millennium Villages (MMV) and Millennium Village (MV) Chibuto

Annual Report
January – December 2011

Prepared For
Mitsui & Co. Ltd

April 30, 2012

I. Executive Summary

This programme aims to use local community capacity and potential with the aid of targeted technologies to pilot the use of a solar powered irrigation system to increase agricultural productivity in Chibuto Millennium Village, located in Gaza Province, Mozambique. There are currently five Millennium Villages in Mozambique, funded in a large part by UNDP, Government of Japan, and the Government of Portugal.

After the conclusion of the program arrangements in 2010, including the approval of the PRODOC and signature of the Cost Sharing Agreement, the activities towards the effective implementation of the project were carried out in 2011, namely the completion of technical designs, the hiring of the project manager (GSB Specialist), starting and get approval of the bidding process for the construction of the Solar Irrigation System by the Regional Advisory Committee of Procurement (ACP) and starting of the construction process.

The construction of the solar powered irrigation system is expected to end in early 2012. .

II. Situational Background

UNDP has been a key link in channeling private sector interest in corporate social responsibility initiatives. The initiation of this project was inspired by Mitsui & Co. Ltd's agreement with the Business Call to Action initiative (BCtA) organized by the British government and UNDP in May 2008 to accelerate the achievement of the Millennium Development Goals (MDGs), and the Tokyo International Conference on African Development (TICAD IV), held by the Japanese government in May 2008 for the same purpose. Through this project in Chibuto MV, this partnership endeavors to be a part of reducing poverty and achieving economic independence for the village through sustainable agricultural development.

The initiative and partnership is a unique and ground-breaking social contribution program that involves a private-sector partnership with a UN organization in Sub-Saharan Africa with a major Japanese company – this is a first for Mitsui, and has not been conducted by many other Japanese companies. It has resulted in concrete initiatives forming public-private partnerships, in which complementary areas of both parties' expertise can be applied.

Planning and promoting these kinds of initiatives based on companies' state-of-the-art technologies is what the BCtA aims to achieve, and will be an important component in developing further BCtA initiatives based on the successful implementation and progress made in this pilot program in Chibuto.

The project has 5 Outputs:

- **Output A:** Program design approved for Private Sector involvement in Millennium Village Programme
- **Output B:** Project management and systems in place for project implementation
- **Output C:** Irrigation and pump systems installed and operational according to design and quality guidelines
- **OUTPUT D:** Operational systems instituted for MMV with sustainability measures
- **OUTPUT E:** Monitoring and evaluation systems in place

Until the end of 2011, Output A was fully accomplished in 2010, Output B was fully accomplished during 2011, Output C was partial accomplished during 2011, Output D was initiated in 2011.

Notable achievements of the project in 2011 include the completion by the approval of the Regional ACP, the bidding process for the construction of the Solar Irrigation System and signing contracts with two companies (TEC - Lots 1, 2 and 3 and Hidroafrica - Lots 4 and 5) in the total amount of USD 515,238.94 (TEC – USD 292,341.29, and Hidroafrica – USD 222,897.36).

III. Evaluation of Progress during the Reporting Period

This project is split in 3 main phases. Most of the preconstruction phase was completed in 2009 to 2010. The first phase (construction) will take place in 2011 to 2012, with the second phase of capacity building planned to take place in into 2012. Therefore, during the reporting year, 2011, theproject activities were focused on Outputs B, C and D, which progress is outlined bellow.

Output B: Project management and systems in place for project implementation. This output prepares the operational and management system at UNDP.

- Most of all management and systems have been in place since Quarter 2 of 2011 as reported earlier, with the exception of the on-site resident engineer who is not yet contracted. The resident engineer role is expected to be of monitoring day-to-day construction in the field, working closely with the team of consultants responsible for design and the overall supervision of construction. In early 2012, the on-site resident egeneer will be selected and contracted in time for accompanying the construction process from the beginning.

Output C: Irrigation and pump systems installed and operational according to design and quality guidelines. This output prepares a final technical designs, with detail specification for tender documents and procurement packaging, follow procurement cycle and contractor appointment according UNDP procedures and follow day-to-day of construction and installations according the standards engineering works.

- Final technical designs and specifications completed and approved for implementation

    - The detailed designs included a number of pieces such as the intake scheme (pipes and wells), the intake scheme (sheet-pilling sections), the intake plan at different levels and pre-fabricated concrete wells. In adition to the designs, the engineers (consultants) provided written documents containing the description of the irrigation systems/construction process and bill of quantities.

    - An independent engineering was procured internationally and contacted to review the technical design, including the drawings, photos, maps and all available documents. The expert issued a report stating that the drawings, designs, bill of quantities and statement of works are fine and comply with national and international standards. Therefore, they could be used for the irrigation system construction.

- Procurement contracts in place for equipment, contractors and works

    - Bidding documents were completed, and expression of interest to bidders launched in two local newspapers (*Noticias*, on June 3rd, 6th and 8th 2011, and in *O Pais* on June 6th, 7th and 9th 2011), as well as in all required UNDP websites;
    - The Invitation to Bid (ITB) was signed and sent out to all 6 (six) interested Suppliers on July 20th 2011;

- Only one bid was received by closing date and time (22nd August, 12:00GMT) from a Portuguese company, Joao Jacinto Tome S.A. The proposed budget was $1,257,000 (one million, two hundred and fifty-seven thousand USD);
- The tender was cancelled because the pricing schedule seemed overly speculative, and because it considerably exceeded the budget which was estimated based on local market costs as of 2010;
- The tender was re-launched on 14th September after a thorough assessment of key factors that led to the failure of the first bid (this included certain obstacles that prevented local companies from applying). A change in procurement procedures, as well as in accepting alternative construction methods that are customary to rural environments in Mozambique, and more commonly used for irrigation systems were introduced among other measures to counter the obstacles faced in the first bidding;

- In order to promote the application of local companies, it was agreed to:
  - Conduct active search of local firms – actions were taken to post advertisements in the billboards of the local construction association and the Ministry of Public Works, in addition to the advertisement in newspapers and website;
  - The bar was lowered for bank guarantees for local firms;
  - International firms were required to secure its local presence;
  - Domestic bidders and joint ventures of domestic bidders applying for eligibility were given preference of 10 and 7½ percent margins in bid evaluation, respectively.
- On 21st September 2011 a pre-bidding conference and site visit was conducted in order to sensitize and clarify to interested parties the scope of the project.

- After the tender was cancelled and re-launched on 14th of September, eight prospective suppliers (SBS Water Systems, Hidroafrica, Telescan, Malacha Construções, Sá Machado Constructors, China Jiangxi Corporation, TEC Constructors, and Belem Constructors), responded to the Invitation to Bid (ITB) by submission of their proposals by closing date and time (14th October, 12:00PM). Although the proposed prices were higher than the estimations conducted earlier, they were within a reasonable range given inflation and exchange rate fluctuations. To cover the difference, a budget revision was conducted.

- The technical and financial evaluation was conducted between 17th October and 4th November, and two suppliers were recommended to award a contract: TEC Construções for lots 1, 2 and 3 (proposed budget of $292,341), and Hidroafrica for lots 4 and 5 (proposed budget of $222,897.36).

- The procurement process was completed using the ITB modality, in full compliance with UNDP's procurement policies and procedures. As such, the process was transparent, competitive, and fair. On 7th November, the UNDP Country Office submitted the approval of the procurement process to the Regional ACP. On 17th November the Regional ACP approved the entire procurement process, and recommended the signing of contracts with TEC Construções for lots 1, 2 and 3, and Hidroafrica for lots 4 and 5. After a period of negotiation with the selected contractors, TEC Construções and Hidroafrica, the final contracts were signed in early December 2011.

- Installation of works on schedule and to required quality standards

  - A site visit was conducted in mid December in order to introduce the contractors to the Chibuto Millennium Village and the Local Governor, as well as for the companies the start preparing the logistical aspects for mobilization.

- Mitsui equipment ordered for supply of free-issue equipment from Japan

Output D: Operational systems instituted for MMV with sustainability measures
This output prepares the operational and management system at the Community level.

- Local Village Committee role-players appointed and ready for training to fulfil operational functions

  - All systems have been in place since the community was formed, with the exception of the irrigation scheme in Chibuto MMV.
  - A scheme for operation, maintenance and safety was discussed with the villagers and extension officers, to identify training needs, requirements for the operators (water, crops, market linkage, maintenance and guard) and how they need to be organized to manage the irrigation system and linkage to the market.

- Market assessment to guide farmers in feasible/profitable linkages to markets in Matola/and or Maputo

  - An Chibuto market assessment was done superficially with the villagers and extension officers, to guide the selection of crops closely with the local demand, required quality and quantity, demand price, and clients.
  - From discussions that took place, the villagers started to understand the market concepts, like value chains, basic selling techniques, marketing tools, market analysis, and profit short and long term.

2011 Overall progress achieved against identified targets and indicators	
Indicators/Targets	**Progress**
Output B	
Project management and support team in place and effective	Partially achieved – Resident Engineer pending – start when mobilization is done
Output C	
Final technical designs and specifications completed and approved for implementation	Fully achieved
Procurement contracts in place for equipment, contractors and works	Fully achieved
Installation of works on schedule and to required quality standards	Not achieved
Output D	
Local Village Committee role-players appointed and ready for training to fulfill operational functions	Initiated
Market assessment to guide farmers in feasible/profitable linkages to markets in Matola/and or Maputo	Initiated

IV. Gender Mainstreaming

During the reporting period, a market assessment was conducted in partnership with the Growing Sustainable Business programme to ensure that the selected crops to be grown for increased agricultural productivity are based on market demand to ensure sustainable increase in incomes. The market assessment took into account gender aspects, where information collected was disaggregated by gender to allow identification potential participation of women in agro-business in the village in order to design and develop gender balanced agro-business activities.. During all of these evaluation and designs, a gender specialist was involved and sought to assess each stage to ensure that the interventions are gender sensitive and appropriate, and that the intervention proposed will be beneficial particularly for women.

V. Risk Management

Flooding due to heavy rainfall in Mozambique was a potential risk for the implementation of the project. With the delay in starting the construction of the system, the construction was runs with the risk of unwanted onsite erosion, or accidents at work. The main plan was to avoid the rainy season, but this was not possible due to the procurement process. Thus, safety measures such as suspending underground works (excavation for sheet-pilling, foundations) during heavy rains, and verifying safety conditions before resuming works have been put in place. As noted before, the overall design has taken flooding/rainy season into account, and has provided that no damages be sustained in the main and ancillary works during such an event.

It will also be noted that prior and during the bidding process, the risk of overall inflation, exchange rate fluctuations, and contractors over estimating costs were thoroughly discussed internally within UNDP, with the project management team, and with Mitsui. As noted in the previous quarter report, all lessons learned from the first bid failure were addressed – in addition budget adjustments, negotiation with the contractors, and adding UNDP funds to address these risks had been put in place so that the project can move forward with implementation without having to significantly inflate costs.

The solar panels are also a prime target for theft. Precautions in terms of technical design to mitigate this risk have been conducted, and currently the most practical design for a guard house to be built below is under discussion. There will also be a fence put and electric fence in place – however, the greatest deterrent for theft will be the level of commitment by the community itself, and in understanding the value that the entire system will have on improving their livelihoods. In this sense, fostering ownership through participatory consultation in each step of the project with the community (building parts of the irrigation canal, selecting types of crops and markets within the framework of the market assessment, operations and maintenance of the system, promotion of business skills) will be essential for the long-term and committed protection of the irrigation system by the community. In addition, the project approached the local authorities (District Administration) to request their support in strengthening the security of solar panels and the whole system.

VI. Partnerships

This project is a joint partnership with the Millennium Villages program and Growing Sustainable Business program within UNDP. As noted earlier, a partnership agreement between the Ministry of Science and Technology was signed in May 2010 (Prodoc) and with Mitsui & Co. Ltd (CSA/In-kind) in September 2010. Although not formalized, potential partnership with agricultural authorities to ensure adequate integration of the system in the local extension services is being considered, and contacts with the Ministry of Agriculture have been initiated. Similarly, contacts with the Ministry of Public Works and the water management authority in Mozambique have been initiated to ensure that adequate water supply is secured for irrigation at a reasonable cost.

VII. Challenges, Responses and Lessons Learned

One of the main challenges over the course of the 2011 was to get a common understanding and agreement on the procurement process and procedures, given that by the amount involved in the bidding, the approval of the selection is under responsibility of the Regional ACP. Apart from that challenge, there is the fact that UNDP CO is not used to enter into large construction procurement services and there was a need to learn from experience of other Country Offices on how to proceed, including the templates to be used.

Of particular note in 2011, the successful completion of the procurement process after overcoming many obstacles, set-backs, and unforeseen factors. The final stage in assessing the technical/financial proposals, re-working the budget, and negotiating with the companies to reach a workable solution that was within budget limitations without compromising quality standards was a complex and delicate process that took careful coordination, creativity, initiative, and attention to detail from all involved. The UNDP CO introduced as many measures as possible to fully penetrate the local market for the small-scale civil works sector, finalize the procurement process, and negotiate, re-work, and address several complications while fully maintaining the UNDP procurement policies and procedures.

The CO team has gained a lot of knowledge and experience from this process. A combination of different engineering and programmatic skills, as well as better knowledge of the local market and realities has emerged, which will be a critical contributing factor for the finalization of the project.

VIII. Conclusions and Ways Forward

This initiative has garnered significant interest both from the private sector and the Government of Mozambique. It will also serve as an important pilot initiative to indicate vital lessons learned in finding even more effective ways that UNDP can encourage the private sector to get involved not only in corporate social responsibility initiatives, but also in finding ways that the private sector can engage and include the poor and vulnerable groups in their core businesses, both on the supply and demand side – on the supply side as employees, producers, and business owners at various points along value chains, and on the demand side as clients and customers for affordable products and services.

For the public sector, the project results can yield important results in seeing how private sector can stimulate economic growth in the rural areas using innovative and sustainable technologies. For UNDP, it can take the experience from this project in further promoting partnerships that will yield innovations and cost effective ways to provide basic services or income generating activities that are crucial for its work in poverty reduction and meeting the MDGs.

In terms of the solar powered irrigation system, it will be the aim of UNDP to use the lessons learned to find further effective ways of involving the private sector, particularly in encouraging investments in the type of renewable energies which can not only save on costs and environmental impact, but can also contribute to creating jobs in the rural agricultural sector.

The promotion of renewable technologies in the rural areas of Mozambique, particularly in the context of increasing agricultural productivity and food security will increasingly become a priority issue. Targeting coordinated support using the strengths of all projects within UNDP supporting the growth and effectiveness of economic activities within a logical framework of a value chain or chain of economic activities in the rural areas could enhance coherence and impact. Within this type of framework, there

will be great potential and need for the development and design of innovative and cost effective renewable energies to raise agricultural productivity in several value chains that have potential for high impact in terms of income generation and poverty reduction.

For the coming year, the project priorities will be:

- The onclusion of the construction phase;
- Training of community members for basic maintenance and management of the system; and
- Social mobilization and agricultural extension work to mobilize the small farmers to engage in production work and equip them with the necessary knowledge, abilities, and appropriate farming techniques to maximize the benefits of the irrigation system to scale up their production and productivity.

Annex:

Financial Report

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United Nations Development Programme
"Mitsui & CO. Ltd"
Project nr 00055103

Provisional Financial Report of Income and Expenditure for UNDP Cost-Sharing Agreement with the Mitsui & CO.Ltd for the period of January – December 2011
(Expressed in US dollars)

I. Operating Fund

Balance of Expenses:	771.193.00
Received 2011 :	0
Total Programme Income 2011:	771.193.00

II. Expenditures:

Operating Expenses	2.259.68
Staff and Other Personal Costs	145.448.68
Contractual Services	532.697.51
Travels	5.855.59
Training	0.00
Fellowships, grants, other	0.00
GMS	10.959.44
Total Expenditure	697.220.90
Balance of Expenses	73.972.10

This is to confirm that the above statement of income and expenditures is correct and that the expenditure was incurred in connection with the approved projects for which the contribution has been received.

Certified by: Jose Macamo – Deputy Country Director, a.i. Date 23/03/12