

6. Input

(1) Input by JICA

- (a) Dispatch of Experts**
 - i) Long term experts**
 - A. Chief Advisor/ Seed Production**
 - B. Project Coordinator/Extension**
 - ii) Short term experts**
 - A. Preparation of Materials for Extension**
 - B. Post-harvest Treatment of Seed**
 - C. Agricultural Machineries (operation, maintenance, etc.)**
- (b) Training**
 - i) Counterpart training in Japan**
 - ii) Counterpart training in other countries**
 - iii) Technology exchange of experts with similar projects**

(c) Machinery and Equipment

Machinery, equipment and other materials may be provided by JICA for implementation of the Project within the budget limitations.

In case of importation such machinery, equipment and other materials under II-6(1)(c) above will become the property of MINAG upon being delivered C.I.F. (cost, insurance and freight) to the responsible authorities of the Republic of Cuba at the ports and/or airports of disembarkation.

(2) Input by MINAG

MINAG will take necessary measures to provide at its own expense:

- (a) Services of MINAG's counterpart personnel and administrative personnel as referred to in II-7;**
- (b) Suitable office space with necessary equipment;**
- (c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;**
- (d) Means of transport and travel allowances for the JICA experts for official travel within the Republic of Cuba;**
- (e) Arrangement of suitable accommodation for the JICA experts and their families;**
- (f) Information as well as support in obtaining medical service;**
- (g) Credentials or identification cards;**
- (h) Available data (including maps and photographs) and information related to the Project;**
- (i) Running expenses necessary for the implementation of the Project;**
- (j) Expenses necessary for transportation within the Republic of Cuba of the equipment referred to in II-6(1) as well as for the installation, operation and maintenance thereof; and**
- (k) Necessary facilities for JICA experts for the remittance as well as utilization of funds introduced into the Republic of Cuba from Japan in connection with the implementation of the Project**

7. Implementation Structure

The Project organization chart is given in the Annex III. The roles and assignments of relevant organizations are as follows.

(1) MINAG

(a) Project Director

The Vice Minister of MINAG, as the Project Director, will bear overall responsibility for the administration, coordination and implementation of the Project.

(b) Project Manager

The Director General of Grain Research Institute (IIGranos of MINAG) and Director General of Grains Agro industrial Group (GAIG of MINAG) will be responsible for managerial and technical matters of the Project implementation.

(2) The Relevant Organizations

The following organizations will be the member of the Joint Coordinating Committee.

- MINCEX
- Agroindustrial Complex (CAI)
- Seeds Inspection and Certification System (SICS)
- Territorial Grain Research Stations (ETIG)

(3) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to MINAG and the relevant organizations on any matters pertaining to the implementation of the Project.

(4) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held at least once a year and whenever deems necessary. JCC will approve an annual work plan, review overall progress, conduct monitoring and evaluation of the Project, and exchange opinions or major issues that arise during the implementation of the Project. A list of proposed members of JCC is shown in the Annex IV.

8. Project Site(s) and Beneficiaries

- Project Sites: IIGranos headquarter and five provinces (Cienfuegos, Villa Clara, Sancti Spiritus, Ciego de Avila, and Camaguey)
- Direct Beneficiaries: 200 rice seed producers in five central zone of Cuba.
- Indirect beneficiaries: 6,500 rice producers in five provinces in the central zone of Cuba

9. Duration

The Project is planned to last for 4 years, counting from the date that the first expert assigned to the Project arrives in Cuba.

10. Reports

MINAG and the relevant organizations shall prepare the following reports jointly with JICA in Spanish.

- (1) Progress Report on a semi-annual basis until the project is completed
- (2) Monitoring and Evaluation Reports at the time of the baseline survey, and at the time of project completion
- (3) Project Completion Report at the time of project completion

11. Environmental and Social Considerations

MINAG and the relevant organizations agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project during the period that the Project is implemented.

III. UNDERTAKINGS OF MINAG

MINAG will take necessary measures to:

- (1) ensure that the technologies and knowledge acquired by the Republic of Cuba nationals as a result of Japanese technical cooperation contributes to the economic and social development of the Republic of Cuba, and that the knowledge and experience acquired by the personnel of the Republic of Cuba from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to JICA experts referred to II-6(1) above and their families, which are no less favorable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in the Republic of Cuba.

IV. EVALUATION

JICA and MINAG will jointly conduct the following evaluations and reviews.

- (1) Mid-term review at the middle of the cooperation term
- (2) Terminal evaluation during the last six (6) months of the cooperation term

JICA will conduct the following evaluations and surveys, to mainly verify sustainability and impact of the Project and draw lessons. MINAG and the relevant organizations are required to provide necessary support for them.

- (1) Ex-post evaluation three (3) years after the Project completion, in principle
- (2) Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, MINAG and the relevant organizations will take appropriate measures to make the Project widely known to the people of the Republic of Cuba.

VI. MUTUAL CONSULTATION

JICA and MINAG and the relevant organizations will consult each other whenever any major issues arise in the course of the project implementation.

VII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA, MINAG and MINCEX.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

- Annex I Logical Framework(Project Design Matrix: PDM)
- Annex II Tentative Plan of Operation
- Annex III Project Organization Chart
- Annex IV Joint Coordination Committee

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PDM (Version 0)

Project Title: "Project for extension and diffusion of technologies for certified rice seed production in the central zone of Cuba"
Project Period: From January 2012 to January 2016 (4 years)
Responsible Organization: Ministry of Agriculture (MINAG)
Implementing Organizations: Institute of Investigation for Grains (IIGranos), of MINAG/ Agroindustrial Group of Grains (GAIG) of MINAG
Target Area: Five central provinces (Cienfuegos, Villa Clara, Sancti Spiritus, Ciego de Avila, and Camaguey) and IIGranos headquarters (Artemisa)
Direct Beneficiaries: Approx. 200 rice seed producers in five central provinces of Cuba
Indirect Beneficiaries: Approx. 6.500 rice producers in five central provinces of Cuba

Narrative Summary	Objectively Verifiable Indicator	Means of Verification	Important Assumption
<p>[Overall Goal] The rice production is increased by improving productivity in the central zone of Cuba.</p>	<p>The average crop yield is increased 20% by 2018 compared with the yield before the start of the project in the 5 central provinces of Cuba.</p>	<p>1. Annual report of GAIG 2. Annual report of National Office of Statistics</p>	<p>1. Certified seeds are commercialized. 2. The policy of rice production policy is continued.</p>
<p>[Project Purpose] The amount of certified seeds produced by leader seed producers, who are trained through the Project, is increased in the Central zone of Cuba.</p>	<p>2.000 tons of certified seeds are produced in the 5 central provinces of Cuba in 2015.</p>	<p>1. Annual report of GAIG 2. Annual report of IIGranos</p>	<p>1. After receiving training, extension workers continue extension activities. 2. Severe drought and flood are not occurred.</p>
<p>[Outputs] 1. Registered seeds production is increased and its quality is improved. 2. Extension activities on rice cultivation is strengthened.</p>	<p>1-1 Quantity of production of registered seeds in IIGranos is increased from 7 tons to 25 tons. 1-2 Ratio of germination is increased from 80% to 90% in 2015. 2-1 53 extension workers in the 5 provinces are trained and certified by the Project. 2-2 "Working Procedures" for extension workers in the 5 provinces is produced. 2-3 Annual extension plan is produced in each province.</p>	<p>1-1 Annual report of IIGranos 1-2 Annual report of IIGranos 2-1 Records of training activities 2-2 Working procedures 2-3 Annual extension plan</p>	<p>3-1 Records of training activities 3-2 Annual report of SICS 4-1 Records of training activities</p>
<p>3. Technical level of the leader seed producers is improved.</p>	<p>3-1 200 leader seeds producers are trained and certified by the Project. 3-2 Ratio of seed certification by SICS is increased from 60% to 80% in 2015.</p>	<p>3-1 Records of training activities 3-2 Annual report of SICS</p>	<p>4-1 Records of training activities</p>
<p>4. Technical knowledge on rice cultivation of SICS inspectors is improved.</p>	<p>4-1 30 inspectors of SICS in the 5 provinces are trained and certified by the Project.</p>	<p>4-1 Records of training activities</p>	

[Activities]	[Inputs]	1. No significant delay is occurred in procurement of materials and equipment. [Pre-Conditions]
<p>1-1 To analyze and determine the target varieties of certified seeds. 1-2 To prepare draft of the certified seeds production plan in each variety based on the rice production plan of the government and elaborate the registered seeds production plan. 1-3 To analyze capability and operational performance of the production facilities related to seed production (agricultural machinery, post-harvest processing facilities and equipment, etc.) of the IIGranos (headquarters and regional stations). 1-4 To elaborate production machinery improvement plan based on the result of above mentioned analysis (1-3) and the registered seeds production plan (1-2). 1-5 To execute the production machinery improvement plan (1-4) (selection of necessary</p>	<p>1. Japanese side: (1) Long-term Experts: 1) Chief Advisor/ Seed production 2) Project Coordinator/Extension (2) Short-term experts: 1) Preparation of materials for extension 2) Post harvest treatment of seed 3) Agricultural machineries (operation, maintenance, etc.)</p>	<p>1. Necessary Cuban counterpart personnel is assigned.</p>

<p>agricultural machinery and the post-harvest processing facilities, examination of its specifications, study on suppliers, estimation of cost, carry out procurement, purchase and installation of machineries and facilities).</p> <p>1-6 To revise and modify the standard of the quality of the registered seeds in IIGranos.</p> <p>1-7 To produce original seeds, basic seeds and registered seeds based on the registered seeds production plan.</p> <p>2-1 To establish the extension department in IIGranos.</p> <p>2-2 To establish an information sharing system among the extension department in IIGranos, the municipal extension workers of IIGranos in the 5 provinces of central zone of Cuba and the municipal extension workers in the same provinces.</p> <p>2-3 To elaborate a rural extension guideline for rice seeds production and extension of rice cultivation techniques.</p> <p>2-4 To conduct the trainings to the extension workers.</p> <p>2-5 To establish the promotion method of usage of the certified seeds to commercial rice producers, elaborate advertising tools and implement promotion activities.</p> <p>3-1 To conduct a baseline survey on present situation of the seed producers (name, address, cultivation area, variety of crops, experience of cultivation, cultivation technique, possessing agricultural machines, drying/selection/storing methods, etc).</p> <p>3-2 To analyze the results of the base-line survey mentioned above, examine the technical level of the seed production of the rice seeds producers, and survey what types of variety are required by the rice producers.</p> <p>3-3 To confirm the effectiveness of seeds production techniques by establishing the demonstration farms in the experimental fields in IIGranos and leader seeds producer's fields in each province.</p> <p>3-4 To improve the cultivation technique by analyzing the results of cultivation at the demonstration farms, and elaborate a guideline on the seeds production techniques.</p> <p>3-5 To conduct trainings on seed producing techniques for seed producers and extension workers for rice.</p> <p>4-1 To elaborate the field inspection guideline of the seed producing fields and distribute it.</p> <p>4-2 To elaborate explanatory leaflets on variety characteristics and distribute it.</p> <p>4-3 To conduct training for SICS inspectors of IIGranos and each province.</p>	<p>(3) Machinery and Equipment</p> <ol style="list-style-type: none"> 1) Computer (Laptop) 2) Projector 3) Portable Generator 4) Printer (White and Black, Laser) 5) Seeder 6) Transplanting machine (2 lines) 7) Tractor approx. 65 HP with rotovator 8) Harvesters (4 lines) 9) Equipment for post-harvest and conservation of seed <ul style="list-style-type: none"> - Pre-cleaner - Dryer - Gravity separator - Seed disinfectant - Weighing-bagging machine - Air conditioning equipment 10) Equipment for demonstration fields <ul style="list-style-type: none"> - Planter Trays - Transplanting machine (2 lines) - Mower - Threshing machine - Dryer - Winrower 11) Micro Bus (min. 10 persons) 12) Pick-up truck (single cabin, min. 4t) 13) Motorcycle (125 cc) 14) Equipment for seed analysis 15) Other equipment necessary <p>(4) Counterpart training in Japan or in the third countries</p> <p>2. Cuban side</p> <ol style="list-style-type: none"> (1) Office space for Japanese experts, (2) Vehicle for transportation, (3) Counterpart personnel, (4) Current expenses (expenses for operation, gas and electricity, etc.)
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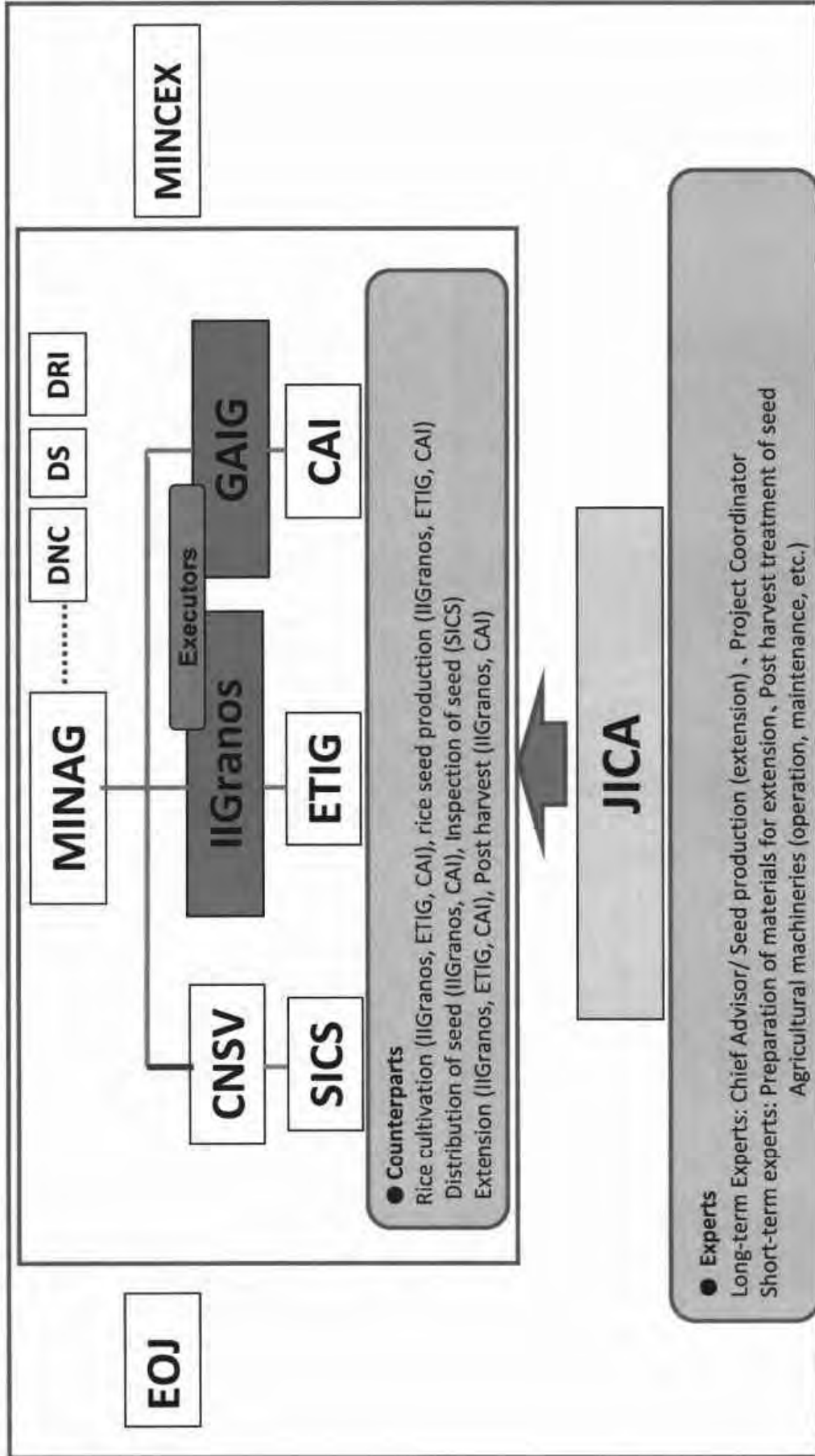
Remarks: IIGranos (Instituto de Investigaciones de Granos = Institute of Investigation for Grains), GAIG (Grupo Agroindustrial de Granos = Agroindustrial Group of Grains), SICS (Sistema de Inspección y Certificación de Semillas = Seeds Inspection and Certification System)

Plan of Operations

Outputs	Activities	2012 FY				2013 FY				2014 FY				2015 FY			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1. The amount of production of the registered seeds is increased and its quality is improved.	1-1 To analyze and determine the target varieties of certified seeds.																
	1-2 To study the certified seeds production plan in each variety based on the rice production plan of the government and elaborate the registered seeds production plan.																
	1-3 To investigate capability and operational performance of the production facilities related to seed production (agricultural machinery, post-harvest processing facilities and equipment, etc.) of the IIGranos (headquarters and regional stations).																
	1-4 To elaborate production machinery improvement plan based on the result of above mentioned investigation (1-3) and the registered seeds production plan(1-2).																
	1-5 To execute the production machinery improvement plan (1-4) (select necessary agricultural machinery and the post-harvest processing facilities, examine of its specifications, study on suppliers, estimate cost, carry out procurement, purchase and install machineries and facilities.																
	1-6 To revise and modify the standard of the quality of the registered seeds in IIGranos.																
	1-7 To produce original seeds, basic seeds and registered seeds based on the registered seeds production plan.																
	2-1 To establish the extension department in IIGranos.																
2. The extension activities on rice cultivation is strengthened.	2-2 To establish an information sharing system among the extension department in IIGranos, the extensionists of IIGranos in the 5 provinces of central zone of Cuba and the municipal extensionists in the same provinces.																
	2-3 To elaborate a rural extension guideline for rice seeds production and extension of rice cultivation techniques.																
	2-4 To conduct the trainings to the extensionists.																
	2-5 To establish the promotion method of the usage of the certified seeds to commercial rice producers, elaborate advertising tools and implement promotion activities.																
3. Technical level of the leader seed producers is improved.	3-1 To conduct a baseline survey on present situation of the seed producers (name, address, cultivation area, variety of crops, experience of cultivation, cultivation technique, possessing agricultural machines, drying/selection/storing methods, etc).																
	3-2 To analyze the results of the base-line survey mentioned above, and examine the technical level of the seed production of the rice seeds producers, and survey what types of variety are required by the rice producers.																
	3-3 To confirm the effectiveness of seeds production techniques by establishing the demonstration farms in the experimental fields in IIGranos and leader seeds producer's fields in each province.																
	3-4 To improve the cultivation technique by analyzing the results of cultivation at the demonstration farms, and elaborate a guideline on the seeds production techniques.																
	3-5 To conduct trainings on seed producing techniques for seed producers and extensionists for rice.																
4. The technical knowledge on rice cultivation of SICS inspectors is improved.	4-1 To elaborate the field inspection guideline of the seed producing fields and distribute it.																
	4-2 To elaborate explanatory leaflets on variety characteristics and distribute its.																
	4-3 To conduct training for SICS Inspectors of IIGranos and each province.																

- ORGANIZATION CHART -

Annex III



Abbreviations

MINCEX	Ministry of Foreign Trade and Investment	CNSV	Plant Protection Research Center
MINAG	Ministry of Agriculture	CAI	Agroindustrial Complex
DNC	Business and Collaboration Department	SICS	Seeds Inspection and Certification System
DS	Seed Department	ETIG	Territorial Grain Research Stations
DRI	International Relations department	EOJ	Embassy of Japan
GAIG	Agroindustrial Group of Grains	IIGranos	Institute of Investigation for Grains

Joint Coordination Committee

1. Functions

The Joint Coordination Committee (JCC) will meet at least once a year and whenever the necessity arises. Its functions are as follows:

- (1) To discuss and decide overall strategies in the management and coordination of the Project,
- (2) To review and endorse the annual plan of the Project,
- (3) To monitor and evaluate the progress of the Project and
- (4) To make decisions relevant to the overall management of the Project.

2. Composition

- (1) Chairperson: The Vice Minister of MINAG (Project Director)
- (2) Vice-Chairperson: Director of International Relations of MINAG
- (3) Members

1) Cuban side

- Director General of IIGranos
- Director General of GAIG
- Representative of MINCEX
- Representative of International Relations Department of MINAG
- Representative of Business and Collaboration of MINAG
- Representative of Seed Direction of MINAG
- Representative of CAI
- Representative of SICS
- Representative of other organizations collaborating with the Project
- Other Personnel Concerned, to be assigned by Cuban side, if necessary

2) Japanese side

- Resident Representative, JICA Mexico Office
- Representative, Embassy of Japan
- The JICA Experts
- The Consultation Team from JICA (if necessary)
- Other Personnel concerned, to be assigned by JICA, if necessary



REGISTRO DE DISCUSIONES

SOBRE

**“EL PROYECTO DE EXTENSIONISMO Y DIFUSION DE
TECNOLOGIAS PARA LA PRODUCCION DE SEMILLA
CERTIFICADA DE ARROZ
EN LA ZONA CENTRAL DE CUBA”**

EN

LA REPUBLICA DE CUBA

ACORDADO ENTRE

**EL MINISTERIO DE LA AGRICULTURA Y EL MINISTERIO DEL
COMERCIO EXTERIOR Y LA INVERSION EXTRANJERA DE LA
REPUBLICA DE CUBA**

Y

LA AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

La Habana, 13 de diciembre de 2011

Con base en el acta de discusiones del Estudio de Planificación Detallada sobre el “Proyecto de extensionismo y difusión de tecnologías para la producción de semilla certificada de arroz en la zona central de Cuba” (en adelante refiérase como “el Proyecto”) firmada el 16 de Septiembre del 2011, entre las autoridades competentes de la República de Cuba y la Agencia de Cooperación Internacional del Japón (en adelante refiérase como “JICA”), JICA ha sostenido una serie de discusiones con el Ministerio de la Agricultura (en adelante refiérase como “MINAG”), el Ministerio del Comercio Exterior y la Inversión Extranjera (en adelante refiérase como “MINCEX”) de la República de Cuba, así como las instituciones relacionadas para elaborar el plan detallado del Proyecto.

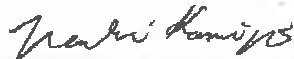
Ambas partes acordaron los detalles del Proyecto como se especifica en el Apéndice.

Ambas partes al igual acordaron que el MINAG será la contraparte de JICA, y responsable de la implementación del Proyecto de conjunto con JICA. Las partes acordaron coordinar con otras organizaciones pertinentes para asegurar que la auto-administración del Proyecto sea sostenida durante y después del período de implementación, para contribuir al desarrollo social y económico de la República de Cuba.

El Proyecto será implementado dentro del marco del Acuerdo de la Cooperación Técnica firmado en el 19 de octubre de, 2009.(en adelante refiérase como el "Acuerdo") entre el gobierno del Japón y el gobierno de Cuba.

Este texto está escrito en inglés y español. Ambas versiones son igualmente oficiales. El texto en inglés prevalecerá en caso de que surja alguna divergencia de interpretación.

Apéndice: Descripción del Proyecto



Sr. Naoki Kamijo
Representante Residente
Oficina en México
Agencia de Cooperación Internacional
del Japón
JAPÓN



Sr. Julio Andrés García Pérez
Viceministro
Ministerio de la Agricultura
República de CUBA



Sr. Orlando Hernández Guillén
Viceministro Primero
Ministerio del Comercio Exterior y la
Inversión Extranjera
República de CUBA

Apéndice

Descripción del Proyecto

I. Antecedentes

Desde la época colonial hasta la década de 1990, el cultivo del arroz en Cuba ha sido implementado principalmente por parte de las organizaciones agrícolas tales como Complejos Agroindustriales (CAI), con mecanización a gran escala que demandaba el uso masivo de fertilizantes y agroquímicos. Sin embargo, a inicios de la década de los 90, se produjo una situación en la que se dificultaron las importaciones de fertilizantes e insumos agrícolas a precios asequibles, convirtiéndose en un obstáculo mayor para continuar con el sistema del cultivo de arroz a gran escala en las empresas especializadas, Complejos Agroindustriales (CAI).

Bajo esta situación el gobierno de Cuba ha establecido en su Plan de Desarrollo como una de las políticas de máxima prioridad, el aumento del autoabastecimiento de productos agrícolas, en especial del arroz, con el aumento de su producción y abastecimiento estable. Con el objeto de cambiar la situación de dependencia en un sistema de cultivo a gran escala y de insumos masivos hacia el aumento de la producción, se ha venido implementado el programa del arroz desde 1996, con la participación del Sector Cooperativo Campesino que produce el arroz a pequeña escala.

El gobierno del Japón recibió la solicitud de cooperación del gobierno cubano para el fortalecimiento de la producción del arroz a pequeña escala en las 5 provincias centrales de Cuba, cuya área de producción ocupa el 40% del área total del país. A la cual, Japón respondió con la cooperación del Estudio de Desarrollo denominado "Estudio del Programa para el Desarrollo Sustentable de la Producción de Arroz en la Zona Central de la República de Cuba" desde octubre del 2003 hasta febrero del 2006. Como resultado de esta cooperación han sido formulados "Políticas Básicas del Plan de Desarrollo" y "Los Planes de Acción que componen el Plan de Desarrollo" y la "Estrategia para Realizar las Políticas Básicas del Plan de Desarrollo" para contribuir al "Mejoramiento Sostenible de la Producción del Arroz de distribución libre en las 5 provincias centrales de Cuba". A través del Estudio de Desarrollo se determinó que la utilización de la semilla certificada para la producción del arroz de distribución libre era muy baja, apenas un 27% en el 2003.

Dicho estudio concluyó que para aumentar la producción era urgente la introducción de semillas de variedades apropiadas para las características de cada una de las áreas. Con la introducción de semillas de alta calidad pueden esperarse resultados casi inmediatos. Por otro lado una de las recomendaciones del Estudio de Desarrollo antes mencionado, es "el fortalecimiento del sistema de certificación de semilla para los pequeños productores". Con base en dicha recomendación, el gobierno cubano solicitó al gobierno del Japón la cooperación técnica relacionada con la producción y difusión de semillas certificadas para el arroz popular.

En respuesta a dicha solicitud, el gobierno japonés implementó el "Proyecto de Fortalecimiento del Sistema de Producción de Semilla Certificada de Arroz

Popular (SEMIFOR)" que fue ejecutado desde marzo del 2008 hasta noviembre del 2010 , con el propósito de fortalecer el sistema de producción de la semilla, en las categorías de semilla original, básica y registrada. Aun cuando dicho proyecto concluyó, se requieren aún esfuerzos continuos para incrementar la producción de arroz.

El porcentaje de autoabastecimiento de los principales granos en Cuba sigue siendo bajo, en un 23% (2008), dentro del cual el arroz es relevante debido a que el 65% del volumen de consumo es de importación (2008).

Por lo tanto, el establecimiento de la seguridad alimentaria a través del aumento de la producción de arroz y su abastecimiento estable, continúa siendo la prioridad máxima de la nación cubana. En este contexto, en el 2008 Cuba estableció el Decreto- ley 259 que aprueba la concesión en usufructo de tierras ociosas para la producción agrícola, incluyendo ampliar las áreas del cultivo de arroz y aumentar el volumen de su producción.

Tomando en consideración la situación antes mencionada, el gobierno de Cuba ha solicitado al gobierno japonés la cooperación técnica con el objetivo de fortalecer las capacidades de los pequeños agricultores para producir semillas certificadas de arroz.

II. Resumen de Proyecto

Los detalles del Proyecto se describen en el marco lógico (Matriz de Diseño del Proyecto: PDM) (Anexo I) y el Plan de Operaciones tentativo.(Anexo II).

1. Título del Proyecto

"Proyecto de extensionismo y difusión de tecnologías para la producción de semilla certificada de arroz en la zona central de Cuba"

2. Objetivo Superior

En la zona central de Cuba se aumenta la producción del arroz a través del incremento del rendimiento.

3. Objetivo del Proyecto

Se aumenta el volumen de la producción de semilla certificada de arroz por los productores líderes de semilla capacitados en la zona central de Cuba.

4. Resultados

- 1 Se aumenta el volumen de producción y la calidad de semilla registrada.
- 2 Se fortalecen las actividades de extensionismo en el cultivo del arroz.
- 3 Se mejora el nivel técnico de los productores líderes de semillas.
- 4 Se mejora el conocimiento técnico sobre el cultivo del arroz en los inspectores de SICS.

5. Actividades

- 1-1 Analizar y definir las variedades pertinentes para la producción de la semilla certificada.
- 1-2 Realizar la estimación del plan de producción de semilla certificada (de cada variedad) que responda al Plan de Producción de Arroz del gobierno y elaborar el plan de producción de semillas registradas en base a dicha estimación.