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## DEVELOPMENT PROJECTS FOR EXECUTIVE BOARD APPROVAL

Agenda item 5 a)

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## PROJECT CUBA 5686

(WIS No. CUB 0568600)

### Agricultural production for food security in Granma province

Duration of project	Three years
Total cost to WFP	17 196 858 dollars
Total cost to Government	27 740 000 Cuban pesos

All monetary values are expressed in United States dollars, unless otherwise stated. One United States dollar equalled one Cuban peso in February 1996.

For relevant statistical data, please consult the WFP country profile for Cuba, which is available on request.

### ABSTRACT<sup>1</sup>

The project aims to enhance provincial food security by increasing on-farm food production substantially on 111,415 hectares. in six municipalities of the Granma province. Seventeen thousand five hundred farm families (90,000 people) will participate directly in this project. Water availability in this dry-land province will be facilitated by improved irrigation and drainage works on 7,250 hectares. Integrated agro-silvo-pastureland packages including low-cost inputs and organic systems will be directly introduced to the farmers in training sessions for all areas in the initial phase. Follow-up by technical provincial teams involved in implementation of the project will promote the use of these packages. Credit will be made available to farmers and cooperative members to assure the agricultural inputs needed. The credit fund originates from the monetization at c.i.f. value of the WFP food products and an additional government contribution of 35 percent in hard currency.

<sup>1</sup> A study was commissioned through the former Director of the United Nations Research Institute for Social Development (UNRISD) to determine the qualification of Cuba as a low-income, food-deficit country (LIFDC). The two key characteristics of LIFDCs defined by FAO are: a) a per-capita GNP below 1,345 dollars in 1994; and b) net cereal trade position averaged over the preceding five years. FAO did not include Cuba in its list of LIFDCs because it only considers countries classified by the International Bank for Reconstruction and Development (IBRD) as eligible for International Development Association (IDA) soft-loan assistance. Only countries which are members of IMF can receive IDA loans. Cuba was not on the list because it is not a member of IBRD or IMF. Since the eighties, Cuban food consumption has been based on 50 percent importation. Daily consumption has dropped since 1989 from an average of 3,000 to 2,000 kilocalories a person. Per capita income in Cuba, according to the Economic Report of August 1995 of the National Bank of Cuba, is 1,174 Cuban pesos. The Economic Commission for Latin America and the Caribbean (ECLAC) estimated 1,261 dollars per capita GDP in 1994. In 1994 the Economist Intelligence Unit (EIU) reports estimated 1,164 dollars per capita GDP. Assuming GNP and GDP are moving together in Cuba, all figures are below the 1,345 dollars platform. Consequently, WFP has agreed to treat Cuba "as if" it were an LIFDC in terms of its mandate to ensure 90 percent of its food to Least Developed Country (LDCs) and LIFDCs. The position will be reviewed on a regular basis.

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## NOTE TO THE EXECUTIVE BOARD

1. This document contains recommendations for review and approval by the Executive Board.
2. Pursuant to the decisions taken on the methods of work by the Executive Board at its First Regular Session, the documentation prepared by the Secretariat for the Board has been kept brief and decision-oriented. The meetings of the Executive Board are to be conducted in a business-like manner, with increased dialogue and exchanges between delegations and the Secretariat. Efforts to promote these guiding principles will continue to be pursued by the Secretariat.
3. The Secretariat therefore invites members of the Board who may have questions of a technical nature with regard to this document, to contact the WFP staff member(s) listed below, preferably well in advance of the Board's meeting. This procedure is designed to facilitate the Board's consideration of the document in the plenary.
4. The WFP staff dealing with this document are:  
  
Regional Manager: F. Roque Castro tel.: 5228-2217  
Desk Officer: J. Conway tel.: 5228-2308
5. Should you have any questions regarding matters of dispatch of documentation for the Executive Board, please contact the Documents Clerk (tel.: 5228-2641).

## **PROBLEM ANALYSIS**

1. Economic factors, particularly the collapse of Cuba's traditional trading partners after the events in the former USSR and Eastern Europe in 1989, have reduced Cuba's foreign income from 8,100 to 1,700 million dollars in 1993, of which 750 million dollars is reserved for fuel purchases and 440 million dollars for basic food.
2. Fifty percent of arable land was sown with export products. Fifty-seven percent of proteins and calories consumed came from imported foods. The export strategy failed to produce the desired results as world sugar prices remained depressed; in 1993/94 sugar harvests dropped to 50 percent of their 1989 level. Hard currency is no longer available to import the large quantities of basic food commodities required, or to finance capital-intensive agriculture. This has created deepening food insecurity.
3. To face these problems Cuba has undertaken an agricultural transformation process, which includes the following measures: a) conversion of state-owned farms into member-controlled cooperatives called UBPC (Basic Units for Cooperative Production); b) opening of experimental market schemes for sale of agricultural products; c) usufruct rights in new lands for those who agree to work them; d) introduction of low-input, environmentally friendly agricultural systems. These measures need time to reach their full impact, and in the short term the Government needs assistance to promote the use of new food-growing techniques and to rehabilitate food productivity, particularly in areas such as Granma province, which used to supply the food consumed in most of the Eastern region.
4. Granma province includes 820,548 people in 8,362 square kilometres and has been identified for WFP assistance as a primary agricultural province capable of supplying itself and the neighbouring provinces of Holguin and Santiago de Cuba with vegetables, beans, corn, root crops, milk and meat. Production in Granma has dropped since 1989 by almost 50 percent due to lack of agricultural inputs such as seeds, fertilizers and pesticides, as well as fuel and spare parts to run the agricultural machinery.
5. Per-capita income in Granma is one of the lowest in the country. People in Granma are uniformly poor and food insecure. Data showed a small variation of  $\pm 10$  percent in the yearly per capita income of 657 Cuban pesos. Credit reaches only a small percentage of Granma's farmers. Disguised unemployment and underemployment are prevalent among the labour force. New agricultural technology needs more dissemination, combined with accessible credit, tools, skills and training for the farmers. Irrigation is inefficient. More drainage systems are needed to prevent soil salinity increases. Potable water reaches only 50 percent of the rural population. The aqueduct and well systems need rehabilitation. Water is often carried by vehicle to isolated rural dwellers.
6. The Cuban ration system as a social safety net for domestic food security cannot provide the full food ration every month. Precarious import-based municipal, provincial and regional food security constitutes another key problem.



## Previous WFP assistance

7. Since 1985 WFP has been exclusively involved in credit for dairy production in Cuba. Projects Cuba 2702 and 2702 (Exp.1) were executed in Camaguey from 1985 to 1992 at a cost to WFP of 68.1 million dollars. In Las Tunas province, WFP assisted project Cuba 4391 was implemented from July 1992 to June 1996 at a cost to WFP of 23.6 million dollars. The Cuban Government recognizes the positive past experience and comparative advantage in using WFP resources for credit to facilitate increased food production.
8. Experience showed that the Cuban counterpart, the Ministry of Agriculture (MINAG), contributed its financial commitment and staff contingent as planned and met the project's targeted production goals, even under difficult circumstances. Twenty-two of the 23 million Cuban pesos available were loaned out to project beneficiaries through the National Bank of Cuba (BNC) in Las Tunas by early 1996. This proved the acute demand for credit. By the end of 1995, 8.3 million Cuban pesos in short-term loans had been repaid, while 13.7 million Cuban pesos remained in longer-term loans which were not yet due. Milk production in Las Tunas increased from 19 million litres in 1991 to 29.5 million litres in 1995, of which 2.5 million litres were retained for on-farm consumption. Agricultural Production Cooperatives (CPA) milk production reached 3.4 million litres, and that of the Private Service Cooperatives (CCS) reached 10.6 million litres by 1995. These increases were due almost exclusively to project 4391. The dairy project in Las Tunas showed that the farmers needed assistance with complementary productive activities, such as food production and forestry, in a more integrated approach.

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## PROJECT OBJECTIVES AND OUTPUTS

### Long-term objectives

9. The project proposes to support Cuban agricultural policy to increase food security through promoting food production and availability in Granma province.

### Immediate objectives

- a) Increase vegetable and root crop (yucca and sweet potatoes) production against the 1994 level in the targeted areas;
- b) Increase maize and bean production against the 1994 levels;
- c) Increase milk production against the 1994 level;
- d) Increase meat production against the 1994.



10. These production objectives are in line with the WFP mandate to help build assets and promote self-reliance in the poorest province of Cuba. Monetization for credit has worked successfully in all former WFP Cuba projects and is the relevant mechanism to stimulate farmers in the agricultural production process. The traditional food-for-work mechanism in Cuba is not feasible for reasons dating from colonial times.

### **Outputs 1994/5-1999 (See Annex II for targets)**

- a) Production increase of 100 percent of vegetables;
- b) production increase of 160 percent of root crops;
- c) production increase of above 200 percent for maize and 60 percent for beans;
- d) production increase of milk by 62 percent;
- e) production increase of meat by 50 percent;
- f) loans to farmers for vegetable crops, root crops and beans, maize, milk and meat production to be measured by various indicators (Annex III).

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## **ROLE AND MODALITIES OF FOOD AID**

11. Food aid is a development tool for farmers. WFP provides it as a grant resource in support of farm credit. The grant resources of WFP therefore represent an opportunity for Cuba to obtain rapid increases in food production using credit to increase farmer productivity.

### **Food inputs and food aid modalities**

12. WFP edible fat, dried skim milk, butter oil, wheat and rice delivered at the port of Havana will be monetized at c.i.f. value through the Food Industry Ministry and its affiliates to create a credit fund. The official United Nations rate of exchange at the day of the vessel's arrival will be used. MINAG will make available to the project beneficiaries through credit, key imported inputs such as tools, fertilizers and construction materials, and additional funds in hard currency, equivalent to 35 percent of the WFP fund. All funds generated from commodity shipments will be deposited in one separate interest-bearing account no later than 60 days from receipt of the superintendence report confirming the Bill of Lading quantities received in each vessel.
13. The food products will be distributed to children under six years of age, expectant mothers, the sick and the aged through the ration card system. It allows six pounds of rice a month and 80 grams of bread daily, among other items. Children under six receive one litre of milk a day. The five WFP food basket items requested relate to the basic entitlements of these vulnerable groups. The Ministry of Food Industry



(MINAL) and Ministry of Internal Commerce (MINCIN) will receive the WFP products and facilitate processing and distribution.

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## PROJECT STRATEGY

### Community participation

14. The project will strengthen farmers' organizations and farmer decision-making processes. Individual farmers and cooperative members will define their needs and the farming systems upon which credit requests will be based. The Small Farmer Association (ANAP) and the Federation of Cuban Women (FMC) will cooperate in the implementation through consciousness-raising, which allows farmer groups to decide whether or not to participate and to design the extent of their participation. Training to facilitate this process will be emphasized in the project work programme, particularly in year one. Top priority will be given to training women as financial managers for the cooperatives and as credit agents for the BNC.

### Credit

15. **Eligibility.** All farm families may benefit from the credit facilities. An individual or cooperative (UBPC, CPA, CCS) may be the subject of a loan, provided no major debts are pending or credits have been taken from other sources. Credits requested must be based on investment and production plans elaborated jointly with project and BNC extension agents. They must be backed up by the availability of inputs necessary to carry them out. Credit is repayable over time against sales/markets available for the production proposed. Production loans may not exceed 80 percent of the estimated harvest value. Recommendations from the project, the credit extensionist and the cooperative authorities will accompany the request to the BNC.
16. **Duration, interest and insurance.** The BNC considers loans either short term (one year) for production or long term (two to 10 years) for investments. Five-year terms are given for: a) soil improvement; b) pastureland and forage development; c) vehicles; d) working animals such as oxen and donkeys. Ten-year terms are granted for: a) cattle; b) cattle station infrastructure; c) other infrastructure; d) irrigation systems and equipment; and e) tractors and other investments. In addition, 15-year terms are granted for housing improvement. In special cases, the BNC branch manager may reschedule loan payments up to three additional years and extend grace periods for cattle purchases. Goods and services involved in the beneficiary loans will be paid by bank cheque directly to the supplier on presentation of invoices to the bank by the beneficiary. UBPCS and CPAs pay four percent annual interest, while CCS and private farmers pay six percent. The lower rate to UBPCs is meant to facilitate their transition to cooperatives from state farms. Land title and housing may not be used as collateral. Insurance must be taken out by every farmer and cooperative to cover production risks. In the case of natural disasters, the Government, through this insurance, will repay to the BNC the money lost by the farmer or cooperative. The subsidized rates of interest are meant to reflect current priority to the farm production sector, and are subject to periodic revision.



17. **Credit training.** All project credit applicants will receive training in farm accounts, in particular how to introduce more economic rationality into the farm accounting systems and how to use credit. The training will be carried out in the Granma Cooperative Training Centre and in the cooperative meeting halls in each municipality. NGOs specialized in cooperative training along with ILO technicians will be involved in training the trainers. Priority will be given to training women in cooperative farm account management.
18. **BNC capacity.** The BNC is the only Cuban bank with branches at the municipal level and a structure for cooperative and farmers credit. It will thus be a key implementing agent of the government. Each municipal BNC branch has a six-person unit for agricultural credit. They visit every potential borrower and fill out basic data cards. Each unit will receive special training in farm loan management and farm budgeting to further upgrade their skill and improve their techniques. They will be further trained in following up and monitoring the loans. Each case is treated individually or as a cooperative, just as the package of inputs is designed according to the need and request. Four of the six NBC branches are fully computerized. The other two will be computerized by the end of 1996. The project will provide further training in credit management for the municipal extension credit staff.
19. **Electronic banking.** A single national unified account will allow the project to gain six percent on all capital on deposit, including the farmers' repayments to the six municipal branches. No service charge will be levied by the BNC on the project account, but each beneficiary bank account opened into which loan credits will be deposited will be charged five Cuban pesos. The BNC staff services will be part of the Government's counterpart contribution to the project.
20. **Repayment.** This is made to the bank directly through the Provincial Marketing Boards, to which the farmer turns over the portion of the harvest negotiated for marketing. The farmers make a yearly contract which specifies that amount. Milk is marketed entirely to the dairy processing factories. Attractive fixed prices are paid. Meat is marketed in the same way to the meat marketing board. Some vegetables may go directly to the free market. Other vegetables, such as root crops, maize and beans, work on a quota system. Based on their annual work plan, farmers negotiate the amount to be sold to the marketing boards, often up to 80 percent of their harvest. These boards supply the national ration system. Harvests above the negotiated amount may be sold on the free markets. The volume of free markets has been increasing on the whole by 50 percent each year since they markets opened in 1993.
21. **Training for integrated agricultural packages.** The Government of Cuba will fund the training. Technical assistance will be provided from outside. It will characterize the first year in order to put in place a) community involvement through discussions with the farmers and their assessment of their needs; b) feasible, integrated land use models and packages; and c) micro-economic rationality in the use of credit. Training will take place in the experimental agricultural stations where new integrated packages have been developed. Five priority groups will be targeted for training:
  - a) **Farmers:** (357 persons; one per cooperative and 100 independents), whose lands will serve as demonstration plots. They are the "trainers" of other



farmers. Integrated packages will be adapted to each farmer's needs, and viable economic return for the farmer's labour will be analyzed and calculated during the farmer's training sessions.

- b) **Extension agents of MINAG:** (18 persons; three per municipality) will coordinate the various low-input agricultural packages adapting appropriately to soil types and farmers' needs.
  - c) **Project management staff:** (34 persons; 10 at the provincial level and four, including three agricultural extensionists, at each municipal level) will be trained in adapting integrated agricultural packages and credit needs to each land use situation.
  - d) **BNC credit agents:** (36 persons; six in each municipality) will be trained in screening for credit and using credit. The emphasis will be on the economic rationality and feasibility of the integrated farming system.
  - e) **Cooperative financial managers:** (357 persons; one person from each of the 257 cooperatives and a sample of 100 independents farmers) will be trained in the principles of farm accounting, cost-benefit analysis and micro-enterprise economic rationality.
22. **Technical assistance:** This will be provided before the training begins in order to ensure technical feasibility and to develop the training modules appropriate for the project area: a) in discussion with farmers; b) through analysis of training carried out to date in Cuba; and c) through modules used in other countries. The technical assistance will specify practical methods of transferring the experimental packages to the farmer. The Provincial Project Manager will serve as Coordinator for the Technical Assistance. Before the project begins, a Technical Cooperation Programme (FAO-TCP) or a Dutch Quality Improvement Fund (WFP/DQIF) grant will engage the services of:
- a) an **extension specialist** to develop the extension plan linking the agricultural experimental stations and their successes to the farmer's field through the work of the municipal agricultural extensionists whose training will take place in those experimental stations;
  - b) a **farm credit specialist**, an ILO or FAO specialist, who will review and modify the farm credit packages proposed for the different types of farmers and design the training modules for the BNC credit agents and the cooperative financial managers;
  - c) an **agro-silvo-pastoralism specialist**, who will review and finalize the packages to be put in place to increase the production of basic crops in the area. Packages include combinations of crop and pastureland rotation, agro-forestry, organic low-input agriculture, integrated pest management, forage cultivation, wind energy and irrigation by gravity systems;





- d) a **continuing FAO-TCP** is proposed to bring five consultants per year each for five weeks to: i) dialogue on technology at the national level; ii) monitor project activities in their special sector and prepare special monitoring reports; iii) train trainers (demonstration farmers) in their special areas - farm management specialist (AGSP), agricultural/water engineer (AGLD/AGLW), plant production specialist (AFPL), milk production expert (AGAM) and an agro-silvo-pastoralist (AGPD). Participatory rural assessment and rapid rural assessment techniques will be utilized extensively.

## Sequencing project activities

23. Water and access to credit have been found to be the main initial constraints. The government fund will be invested in the water systems while the WFP monies will be used for credit. The first year of project operations will begin with procurement of essential inputs and adaptation and rehabilitation of the irrigation and drainage works under the technical supervision of the Institute of Irrigation and Drainage. The hydrological work on 7,250 hectares will bring additional water to these fields to allow double and triple cropping on prime fertile land. In order to provide drinking-water for livestock, 726 windmills for cattle stations on 50,000 hectares will be installed locally, accompanied by drinking-pools. Community mobilization and training activities involving micro-project design, facilitated by the Association of Small Farmers (ANAP), will characterize this stage. The potential loan recipients will be preparing their loan plans. Loans for these 7,250 hectares will begin after the irrigation works are in place. On other lands the loans will begin earlier. The chronology of project implementation takes a special importance in this framework. Time bar-charts will be developed as an annex to the annual work plans showing the sequence of activities.

## Project management

24. A National Project Committee will be responsible for the overall policy definition and strategic management of the project at the central level. The vast network of the MINAG agricultural research and experimental stations will assist in the project. Agreements will be drawn up by project management for the services of these institutions.
25. A special project management unit will be put in place in Granma province composed of five full-time professionals. Six community development workers will coordinate in each of the six municipalities, assisted by three agro-extensionists and six credit extensionists who will serve as primary links to the farmers in each municipality. A coordination unit for irrigation and drainage will work under the local project management team. Full authority in all operational project matters will be delegated to the provincial project management unit.



## Phasing out

26. The fund is structured to be "revolving" and constitutes the sustainable basis of the project. The MINAG will retain the services of the Project Loan Committee and the BNC after the termination date of the WFP project and continue to guarantee the purchasing power of the fund. The Government is willing to negotiate a continued hard currency supply before the end of the project life, but the need for it should naturally reduce over time.

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## BENEFICIARIES AND BENEFITS

27. **Beneficiaries in general:** The project is open to all citizens in the project area who wish to take up agriculture or join a cooperative. The cooperatives are open to new members. The 90,000 direct beneficiaries constitute 17.3 percent of the total project area population. The project implementation team is mandated to seek out the participants most in need. This is determined during the preparation of the loan portfolio of each loan applicant. The project can guarantee a loan to a beneficiary who would not otherwise qualify.
28. **Direct beneficiaries:** 3,993 poor independent farmers with land use rights not belonging to any cooperative association. These producers hold 15 percent of the land in the project area in plots averaging about four hectares. Since the producers are not organized, the project will seek them out individually. Earlier project experience suggests that many of them could become among the project's most productive persons. Poor peri-urban dwellers who need credit to start vegetable gardens and for sheep raising may become project beneficiaries through loans made available to them.
29. **4,730 members of 130 CCSs:** These farmers hold six percent of project land and average 1.4 hectare a member. They hold private land title and join cooperatives to share common services and enjoy economies of scale, e.g., tractors, marketing, tools, oxen, seeds.
30. **1,092 members of 55 CPAs:** These farmers hold eight percent of the land and average 7.2 hectares per member. They represent property owners who joined forces in collective ownership and hold initial shares according to the contribution of each owner. They have a long cooperative experience in Cuba.
31. **7,664 members of 72 UBPCs:** These farmers average 10.4 hectares per member and hold 71 percent of the arable land. They were workers on state farms who now own shares in the cooperative and enjoy usufruct rights over the land they work. Since 1993, 80 percent of state farms have been turned into UBPCs. The challenge of the project is to help these beneficiaries function as true cooperatives. The internal organization of the UBPCs takes the form of smaller sub-production units linked to groups on particular land areas with specific lines of production. Separate accounts of costs and receipts are kept by the sub-units.



32. **Indirect beneficiaries:** The government contribution to the project envisions road construction, housing, and irrigation and drainage works. These new activities will create additional jobs for the underemployed and those in disguised unemployment. Up to 5,000 new on- and off-farm jobs are to be created in agriculture, irrigation, animal raising and related activities. The population of Granma, Santiago de Cuba and Holguin provinces will benefit from increased food security as the need for imports is reduced. Vulnerable group ration recipients will benefit from WFP food products also as indirect beneficiaries.

### **Anticipated effects of the project on women**

33. Disaggregated statistics by gender will be collected before the project commences by the Cuban Economic and Social Science Research Institute, and monitored over the project's life.
34. **Credit management:** The project targets 30 of the 36 positions (83 percent) to be occupied by women by 1999. At present, 18 (50 percent) are women. These women will receive priority project training in credit management.
35. **Agricultural:** Data provided by the Federation of Cuban Women (FMC) show the percentages of women's employment in agriculture varying from 11 to 23.5 percent in the six project municipalities. The project proposes to double the women's income-earning employment in agriculture by:
- a) increased vegetable gardening and dairy farming by women;
  - b) responsibility for the forestry nurseries within the dairy farms and vegetable/root crop farms: i) collection of seeds; ii) nursery management; iii) planting of seedlings; iv) care and maintenance of seedlings; v) fuelwood collection; and vi) domestic use of wood products;
  - c) responsibility for the "green medicine" gardens in each municipality to produce the (18) medicinal plants needed in pharmacological processing.
36. **Cooperative financial management and administration.** The number of women members of cooperatives calculated in November 1995 by the FMC in Granma shows 812 in dairy cooperatives and 463 in farm production cooperatives (just under 10 percent of membership). One culturally acceptable method to increase women's participation will be training courses to prepare women for financial and administrative management. The project will give priority to women for cooperative farm account management training and marketing training. The target is to double the women's participation over three years.

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## **PROJECT SUPPORT**

37. Successful IFAD-designed farm credit systems will be used. IFAD is negotiating its return to Cuba once a government default on repayment is regularized. UNICEF will support potable water availability through aqueduct systems and water storage



tanks in small rural communities. Cooperation in popular television programmes for farmer training will be undertaken with UNICEF and UNESCO. A FAO-TCP project has been proposed and discussed with FAO representatives in Cuba, and terms of reference have been drawn up. WHO will help in the animal health activities of the project, and ILO has expressed written interest and its intention to seek funding to assist cooperative training in the project through a DANIDA or UNDP-funded project.

38. Negotiations have been conducted with NGOs to ensure their participation. The agreed-upon short list of selected NGOs was compiled in terms of their expertise: for cooperative training a) FUNDESCOP, a Spanish NGO for cooperative development. The FUNDESCOP in-country Director has been contacted and their cooperation is being formulated; b) CCA, the Canadian Cooperative Society; c) the Swedish Cooperative Association; d) Dejardins Quebec will be contacted to provide advice on farm budgeting, farm management and small enterprise management adapted to Cuban needs. NGOs in the cooperative sector are mandated by the Government to work under the auspices of the Small Farmers Association (ANAP).

### **Non-food items**

39. During the appraisal exercise the need was identified for items that are particularly difficult to procure through normal Cuban channels and which are outside the farmer credit packages. A final list will be determined on a yearly basis depending on WFP resource availability.

### **Monitoring and evaluation**

40. The Cuban Economic Social Science Research Institute will be commissioned to establish monitoring programmes. Disaggregated statistics by gender, including number of households headed by women, will be developed by the Institute and built into the monitoring system just after the plan of operations is signed.
41. Suggested key indicators (see Annex III) have been designed by the appraisal mission for monitoring in each sector: water (irrigation, drainage), agricultural production, credit, training and cooperatives. These indicators will form the basis of a project implementation report (PIR) to be sent quarterly to WFP and to prepare the country office project report (COPR) to be sent to Headquarters every six months. New and detailed data in the case of monetization will be included, as already requested, to all WFP country offices. The key credit component will be monitored through a computerized credit programme in each of the six NBC municipal branches. The programme will be harmonized to meet both NBC and project needs.
42. Training courses will be held to form the computer operators in the BNC. In addition, the Las Tunas project Cuba 4391 developed a computer program with 21 tables showing in detail the effects and actions of the project. This database will be adapted to the livestock and dairy production component of the new project Cuba 5686. In this way, the new project will benefit from the experience and work of the earlier projects. Finally, a series of technical visits by FAO and ILO experts once each year will result in a substantive monitoring report, to be discussed before



leaving the country in order to have the recommendations put into practice. A budget of 100,000 dollars has been reserved by WFP to support monitoring activities.

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## **PROJECT FEASIBILITY AND SUSTAINABILITY**

### **Technical feasibility**

43. The appraisal mission judged that the irrigation and drainage works proposed on 7,250 hectares were technically appropriate and feasible during the project life. The experience and personnel capacity of the Institute of Irrigation and Drainage (IID) was judged to be fully adequate.
44. The mission judged the increased production yields to be technically feasible within the project life, given the increased water availability on 7,250 hectares, implying double cropping, and careful selection of appropriate soils for rain-fed agriculture. The application of integrated forestry, animal raising, and proven agricultural packages on the experimental research stations in Cuba would be applied to the farmers' fields. Different packages of mixed and integrated systems have been designed for different soil and rainfall conditions to allow maximum flexibility and minimum expense. The livestock sector will be strengthened by increased water access, forage protein banks, and genetic improvement.
45. The success of the credit depends not only on the availability of the loans at reasonable terms, but also the guarantee of the Government to make available the means of production (inputs) to the farmer in a timely manner. The MINAG at the highest level has backed this guarantee by a commitment of 35 percent in hard currency.

### **Economic viability**

46. The milk/meat production technological packages were adapted to the independent farmers (units of five cows), CCS cooperatives (15 cows per unit) and UBPC cooperatives (60 cows per unit). The packages involve improved forage production, better access to water, tree planting for shade and fencing, and increased birth rates based on animal health and genetic upgrading. The production credit needed was calculated at 8.4 million Cuban pesos from the WFP contribution, which yielded an IRR of 14 percent and a cost-benefit ratio of 1.20.
47. The integrated food-crop production credit packages require 7.7 million Cuban pesos from WFP. The IRR was estimated at 17 percent and the cost-benefit ratio at 1.24. Detailed calculations are available. Both of these packages benefit from a sunken investment of 13.16 million Cuban pesos by the Government in water works. A water tax is foreseen to maintain the investment over the long term.



## **Social viability**

48. Land tenure conditions are well defined and do not represent a problem on the 111,415 hectares worked in the project by these farm groups. Moreover, there are no land tenure disputes in the province. The new farming systems have been tested in some places. The social viability on a small scale was demonstrated.

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## **RISKS**

### **Environment**

49. Highly saline soils represent only two percent of the project area. All irrigation works will be accompanied by drainage works to prevent increased salinization. Salinity levels in all water sources will be monitored carefully to control the water quality. Tree planting will reduce deforestation and provide protection against erosion in watersheds, coastlines, farms and pasturelands.

### **Input pricing**

50. Prices for most agricultural inputs are determined centrally; but over time the inputs may be sold through the cooperatives. This liberalization would have to insure the purchasing power of the Cuban peso fund.

### **Marketing**

51. It is expected that the experimental "free" agro-industrial markets where farmers sell their surplus production will continue to grow. However, there is a risk that policy may change and the free market experiment may not grow at the expected pace. The Government has fully supported the experiment to date.

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## **DISINCENTIVES, DISPLACEMENT AND DEPENDENCY**

52. Cuba currently imports 50 percent of food consumed. Cuba is a net food importer of the five items supplied by the WFP project: wheat, rice, dried skim milk, butter oil and edible fat, at the national, provincial and municipal levels. Dried skim milk, butter oil and edible fat are used in the milk production process. The project's immediate objectives include increased milk production to decrease the current import need. The other immediate objective of increased food crop production will lessen dependence on cereal and food imports.



## PROJECT COSTS

53. The cost breakdown for the project is as follows:

<b>PROJECT COST BREAKDOWN</b>			
	Quantity (tons)	Average cost per ton	Value (dollars)
<b>WFP COSTS</b>			
<b>A. Direct operational costs</b>			
Commodity <sup>1</sup>			
- Wheat	15 000	193	2 895 000
- Rice	6 900	290	2 001 000
- Dried skim milk	3 000	1 900	5 700 000
- Edible fat	1 000	1 000	1 000 000
- Butter oil	1 000	1 900	1 900 000
<b>Subtotal commodities</b>	<b>26 900</b>		<b>13 496 000</b>
Ocean transport			1 409 000
Superintendence			14 090
<b>Subtotal direct operational costs</b>			<b>1 423 090</b>
<b>B. Direct support costs</b>			
- Monitoring and Evaluation			100 000
<b>Subtotal direct support costs</b>			<b>100 000</b>
<b>Total direct costs</b>			<b>15 019 090</b>
<b>C. Indirect support costs (14.5 percent of total direct costs)</b>			<b>2 177 768</b>
<b>TOTAL WFP COSTS</b>			<b>17 196 858</b>

## GOVERNMENT COSTS

### Government costs and WFP credits

Component	Government	WFP	Total
- Irrigation and drainage system for agriculture	10 260 000	-	10 260 000
- Water supply for animal raising	2 900 000	-	2 900 000
- Food crop production credit	-	7 700 000	7 700 000
- Milk/meat production credit	1 800 000	6 600 000	8 400 000
- Roads	2 700 000	-	2 700 000



### PROJECT COST BREAKDOWN

	Quantity (tons)	Average cost per ton	Value (dollars)
- Forestry plantations	2 800 000	700 000	3 500 000
- Research pilot projects	1 250 000	-	1 250 000
- Social infrastructure	2 900 000	-	2 900 000
- Electrification (solar pumps)	600 000	-	600 000
- Training	1 000 000	-	1 000 000
- Monitoring and Evaluation	100 000	100 000	200 000
- Project management	250 000	-	250 000
- Loan management	320 000	-	320 000
- Windmills	390 000	-	390 000
- Unforeseen	470 000	-	470 000
<b>Total</b>	<b>27 740 000</b>	<b>15 100 000</b>	<b>42 840 000</b>
<b>TOTAL GOVERNMENT COSTS</b>			<b>27 740 000</b>
<b>External funding (UNICEF, FAO, PAHO)</b>			<b>500 000</b>
<b>TOTAL PROJECT COSTS (WFP and Government)</b>			<b>46 438 850</b>

WFP costs as a percentage of total project costs: 37 percent

<sup>1</sup> This is a notional food basket used for budgeting and approval purposes. The precise mix and actual quantities of commodities to be supplied to the project, as in all WFP-assisted projects may vary over time depending on the availability of commodities to WFP and domestically within the recipient country.

## COORDINATION AND CONSULTATION

54. The project idea and project outline have been circulated for technical review to the specialized United Nations agencies, particularly FAO, ILO, UNESCO and the Department of Technical Cooperation (DTCD) of the United Nations. Their comments, as well as FAO comments during the appraisal mission debriefing, have been taken into account by the appraisal mission for the preparation of the project summary. An ILO consultant was fielded for the appraisal mission, along with consultants in irrigation, drainage, farming systems, cooperatives and credit systems, all of whom have many years of experience in FAO, United Nations Research Institute for Social Development (UNRISD) and ILO. The project summary was submitted to FAO, ILO and DTCD for final technical review, and their eventual additional comments will be reflected in the project plan of operations. Clearance of the Consultative Sub-Committee on Surplus Disposal (CSD) was requested.





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## **RECOMMENDATION OF THE EXECUTIVE DIRECTOR**

55. The project is recommended for approval by the Executive Board.



## ANNEX I

Table 1(a)

<b>GRANMA FOOD PRODUCTION PROJECT COOPERATIVES BY MUNICIPALITY<sup>1</sup> AND TYPE (figures at 31.12.1995)</b>
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Municipality	UBPC		CPA		CCS	
	Meat/milk	Veg/Crop	Meat/milk	Veg/Crop	Meat/milk	Veg/Crop
Cauto Cristo	5	-	1	5	7	12
Jiguani	10	5	4	5	7	22
Bayamo	23	4	11	18	13	21
Yara		7	1	5	6	13
Manzanillo	7	5	1	3	7	16
Niquero		6		1		6
<b>Total</b>	<b>45</b>	<b>27</b>	<b>18</b>	<b>37</b>	<b>40</b>	<b>90</b>

<sup>1</sup> The project would allow some participation outside these primary municipalities.

Table 1(b)

<b>SMALL PRIVATE FARMERS BY MUNICIPALITY</b>
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Municipality	Members	Area (Cab) <sup>1</sup>
Cauto Cristo	552	33.4
Jiguani	690	44.8
Bayamo	1 304	595.1
Yara	569	313.6
Manzanillo	400	198.4
Niquero	476	31
<b>Total</b>	<b>3 991</b>	<b>1 216.3</b>

<sup>1</sup> One caballería equals 13.42 hectares.



Table 2

Municipality	UBPC				CPA				CCS			
	Milk/meat		Veg/crop		Milk/meat		Veg/crop		Milk/meat		Veg/crop	
	Area(Cab) <sup>(2)</sup>	Members	Area(Cab)	Members	Area(Cab)	Members	Area(Cab)	Members	Area(Cab)	Members	Area(Cab)	Members
Cauto Cristo	825.1	660			53	36	91	204	44.1	420	17.9	382
Jiguani	1 108.1	1 165	84.8	196	91	83	25	63	34.3	436	48	869
Bayamo	2 374.7	2 293	54.6	250	198.6	158	66	87	98.3	780	58	265
Yara			150.8	817	38.6	24	8	277	18.5	360	29	848
Manzanillo	1 018	838	166.8	679	16.4	14	49.2	121	61	164	51.1	92
Niquero			165.6	766			6	25			34.4	114
<b>Total</b>	<b>5 325.9</b>	<b>4 956</b>	<b>622.6</b>	<b>2 708</b>	<b>397.6</b>	<b>315</b>	<b>246.2</b>	<b>777</b>	<b>256.2</b>	<b>2 160</b>	<b>238.4</b>	<b>2 670</b>

<sup>1</sup> One caballería equals 13.42 hectares.



**ANNEX II****PRODUCTION TARGET INCREASES ('000)**

	<b>Base year</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Vegetable</b>	15	23.8	30.7	32.1	45.4
root crops (plantain/sweet potatoes)	53.5	97.2	119.6	140.7	159.1
<b>Beans cereal</b>		0.59	0.71	0.87	1.08
(maize)	5.6	6.4	8.2	9.9	10
<b>Milk (million/litres)</b>	44	55.2	62.6	70.7	80
<b>Meat (tons)</b>	12.2	15.6	16.9	18.5	19.5



## ANNEX III

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**SUGGESTED MONITORING INDICATORS****Root crop and vegetable production**

- a) Seeds provided
- b) Fertilizers/pesticides used
- c) Hectares planted
- d) Yields received
- e) Supply to marketing agencies
- f) Supply to free agro-industrial markets
- g) Hectares irrigated (new pumping stations)
- h) Training days received in farming packages

**Maize and bean production (by farming unit)**

- a) Hectares irrigated (pumping stations)
- b) Seeds provided
- c) Fertilizers/pesticides used
- d) Tools made available
- e) Hectares planted
- f) Yields received
- g) Supply to marketing agencies
- h) Supply to free agro-industrial market
- i) Training days received in farming packages

**Milk production**

- a) Production by cow/day (litres)
- b) Milking centres constructed
- c) Increased heads of milking cows
- d) Milk quantity delivered to plants and directly distributed (litres)
- e) Training days received in milk production packages



### **Meat production**

- a) Herd increase (head of cattle)
- b) Forage planted
- c) Increased water availability (windmills, dams, dikes, watering pools)
- d) Kilogramss of meat marketed
- e) Training days received in meat production packages

### **Credit sector**

- a) Loans granted by trimester
- b) Loan beneficiaries by trimester by gender
- c) Sector of credit by trimester
- d) Terms of payment by trimester
- e) Use of hard currency fund by trimester
- f) Long/short-term loans granted
- g) Repayment rates and defaults
- h) Training days received in credit questions

