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PROJECT CHINA 5652

Northeast Sichuan integrated agricultural development project (WFP/IFAD)

| | |
|--------------------------|--------------------|
| Duration of project | Five years |
| Total cost to WFP | 18 998 300 dollars |
| Total cost to Government | 31 484 900 dollars |

All monetary values are expressed in United States dollars, unless otherwise stated. One United States dollar equalled 8.28 yan Renminbi in November 1995.

ABSTRACT

This food security and poverty alleviation project is in consonance with the Country Strategy for China. It has been designed and will be implemented in collaboration with IFAD. The project aims at increasing the income levels of 212,000 poor households in eight counties of Nanchong and Wanxian prefectures in the north east part of Sichuan province, which is one of the poorest areas of China. WFP assistance will be used as an incentive to support the development of agriculture, forestry and rural infrastructure and to participate in training. Food for work activities will include terracing and deepening of soil, soil conservation, improvement of irrigation systems, protective forestry, drinking water supply schemes and construction of rural roads. Food for training will be given to improve the technical skills of targeted people, to improve literacy skills, especially of women, and to train women in income-generating activities. IFAD's assistance, amounting to some 20 million dollars, will be used to provide loans to the farmers to provide loans to the farmers for crop and animal production, economic trees, for women's income-generating activities, and for strengthening agricultural support services. WFP, IFAD and the Government's collaboration will help to mainstream women's development activities.

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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.
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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. The project is located in Sichuan province, which is one of the poorest provinces in China, being ranked 29th out of the 31 provinces on the basis of annual income per capita in 1994. Of China's 70-80 million people living below the poverty line of RMB 440 (53 dollars) per capita per annum, 11.8 million (15 percent) live in Sichuan.
2. The project area is situated in the hilly and mountainous Nanchong and Wanxian prefectures in the northeast of the Province and covers eight counties in these two prefectures (Langzhong, Nanbu, Yilong and Jialing counties in Nanchong prefecture and Wuxi, Wushan, Yunyang and Fengjie counties in Wanxian prefecture). All of the counties are national or provincial poverty counties. Within these counties, 94 out of a total of 398 townships have been selected for assistance. Based on net per capita annual income of Y350 and net food availability of 200 kilograms, a further selection of the poorest villages and cooperatives has been made with the project covering 1,020 villages (83 percent of the total villages in the townships) and 7,965 cooperatives (74 percent of the total cooperatives in the project villages). The project covers some 244,000 households (68 percent of total households in the project villages) and includes a total population of 907,000 people.
3. Per capita farmer's income in the project area averages RMB 328 (range RMB 222 to 415), 25 percent less than the county average of RMB 440. The arable land is only 0.06 hectares per capita, giving an average cultivated area of 0.22 hectares per household. Net food availability in the project townships averages 211 kilograms (range 178 to 339 kilograms), or 11 percent less than the county average of 243 kilograms. The project area has a deficit in food grains and must import more than 55,000 tons of grain annually. Most farming households grow only eight to nine months' worth of their food requirements, a large portion of which comes from tubers. Currently, the Government supplies about 5,000 tons a year of relief grain to the neediest families, and project households have to purchase substantial quantities of re-sold grain.
4. The main constraints to agricultural production are the low fertility of the soil; steep slopes and thin soils; frequent drought; excessive run-off and low infiltration causing frequent periods of moisture stress; flooding and water-logging on soils with poor drainage; lack of guaranteed irrigation; low temperatures in higher elevations at the beginning of the growing season; problems of erosion; and lack of cash resources to purchase the necessary inputs for intensification of agriculture.
5. Other causes of poverty relate to the overall socio-economic conditions of the project area as illustrated by low levels of literacy (30 percent of the population is illiterate, 60 percent of whom are women); low levels of education, making it difficult to popularize advanced agricultural techniques; poorly developed infrastructure, with more than 50 percent of the project villages inaccessible by roads; lack of access to safe drinking water, necessitating collection of water over long distances particularly during seasonal droughts; inadequate schooling and health facilities; and lack of access to cash income. Education and health facilities for



women are especially low, and with the "temporary" migration of many young male farmers to the cities, a certain "feminization" of poverty has taken place.

6. According to extensive household interviews carried out by a joint WFP/IFAD preparatory mission, the highest priority of project households is to ensure their food security by improving the productivity of their land through land improvement and infrastructure works, through access to credit to purchase inputs, and through increasing pig raising as a source of cash income.
7. Since most of the labour and other resources of the rural population are used to assuage current hunger, productivity-increasing investments cannot come about without external help. In this context, food aid has a legitimate role to play in order to allow poor households to seek sustainable food security through engagement in productivity-increasing activities. IFAD credits will be made available to assist project households to take up other supplementary income-generating activities, particularly livestock and economic trees, in order to increase their cash incomes.

Previous WFP assistance and future strategy

8. Since 1988, new projects for WFP assistance to China aimed at improving food security and alleviating poverty have been integrated agricultural development projects in the poorest provinces. As detailed in the China CSO document presented to the Fortieth Session of the CFA, these projects have been or are being successfully implemented, which has been confirmed by several reviews and evaluations. The additional features of the proposed project, which was specifically foreseen in the CSO, are IFAD collaboration and mainstreaming of women's development activities.

PROJECT OBJECTIVES AND OUTPUTS

Long-term objectives

9. The long-term objectives of the project are to increase household food security and income levels as well as to improve the living conditions of the target population through more sustainable agriculture, forestry, infrastructure development, and income-generating and social development activities.

Immediate objectives

10. The immediate objectives of the project are:
 - a) to increase and stabilize grain production through: i) terracing and deepening of soil on sloping dryland areas combined with supplementary watering facilities and soil conservation measures (WFP/Government of China funding); ii) improvement of irrigation systems to provide a guaranteed source of water for paddy production (WFP/Government); iii) provision of seasonal credit for production inputs (IFAD loans); iv) increase in livestock, especially pigs, for the production of manure (IFAD loans); v) protection of arable land through



- tree planting on upper slopes and other soil conservation measures (WFP, Government financing);
- b) to increase cash income of project area households through: i) provision of credit for livestock production, (IFAD, Government of China funding); ii) provision of credit for economic tree production, including fruit trees, mulberries for silkworm cocoon production, and medicinal plants (IFAD, Government of China funding); iii) development of income-generating activities for women, including small-scale poultry production and crafts such as silk-weaving and vegetable processing (IFAD, Government of China funding);
 - c) to provide drinking water through the construction of ponds and wells for the population which currently has no or only limited access to safe water (WFP, Government of China funding);
 - d) to improve transport facilities through road construction in order to reduce isolation of villages, and to provide better access to supplies of inputs, markets for produce and social services (WFP, Government of China funding);
 - e) to increase women's capacity to earn an independent income, to improve their literacy and knowledge of nutritional and health issues through training (WFP, IFAD and Government of China funding);
 - f) to enhance project sustainability through; i) training programmes in crop and livestock production; and forestry, income-generating and social development activities (WFP, IFAD, Government of China funding); ii) improvement of services and facilities for agricultural extension, veterinary stations, animal breed improvement, and input supply (IFAD, Government of China funding); iii) development of soil conservation measures including tree-planting, forest protection, and field structures for control of run-off and soil erosion (WFP, Government of China funding).

Outputs

WFP assisted activities

11. **Dryland Improvement** (13,107,200 workdays or 56 percent). This activity involves the improvement of 81,800 mu (about 5,450 hectares) of existing sloping dryland areas that already have semi- or quasi-terraces, typically on areas from 20 to 100 mu in size within a small catchment. Measures would include: a) improved terracing and land-levelling. In Wanxian, earth terraces would be constructed on 9,000 mu with an average slope of 8 degrees, and stone terraces would be constructed on 42,900 mu with an average slope of 18 degrees. In general, slopes above 25 degrees would not be terraced, but would be planted with trees and/or retired from crop production following land improvement and increased grain production on the less steep lower slopes. In Nanchong, terraces with stone bases would be constructed on 29,900 mu; b) soil deepening using explosives to break up a compacted layer below the soil surface, in Nanchong prefecture only; c) construction of small water tanks, typically ranging from 150 to 400 cubic metres in size, for



supplementary watering, mostly during the summer months; d) construction of water channels; e) construction of manure pits (an average of one pit per two mu) for storage of manure; f) construction of sediment traps (an average of one pit per two mu) to prevent silting up of the water tank and loss of valuable top soil; g) field footpaths for field access.

12. **Paddyland Improvement** (1,001,700 workdays or four percent). This activity is proposed only for Nanchong, and involves the improvement of 28,350 mu (about 1,890 hectares) of land. About half the land to be improved is classified as winter-water paddy land, i.e., land in which water is stored during the winter in order to provide irrigation for the summer crop. The other half of the land to be improved is "rain-hoping" paddy land; paddy is grown on this land in the summer if there is sufficient water, and a winter crop of wheat or rapeseed is also grown. The measures would include: a) development or improvement of water storage schemes (including 215 mountain ponds and 151 tanks), improvement of canal systems (81 kilometres) from existing storage schemes, and 10 stream diversion schemes, for the provision of guaranteed irrigation on 21,916 mu (about 1,461 hectares); b) development of seven pump schemes, for the provision of guaranteed irrigation on 6,434 mu (about 429 hectares), 1,835 ponds and 621.5 kilometres of canals/drains.
13. **Drinking Water Supply** (1,126,000 workdays or five percent). Some 204,000 persons suffer from acute perennial or periodic shortages of drinking water, which forces them to haul often poor-quality water from long distances (one to two kilometres several times a day, usually by women). The project would support the construction of 1,226 water ponds (capacity range 50 to 400 cubic metres); 807 dug wells without lifting devices; 814 dug wells fitted with hand pumps or electric pumps; and 134 pump systems from local water sources.
14. **Protective Forests** (2,284,000 workdays or 10 percent). In order to protect the arable lands from erosion and soil loss, more afforestation on slopes above the terraces will be implemented, using species that can supply fodder and firewood needs or those that generate income (longxu grass). Mountain closure involving the exclusion of all exploitation for five to eight years, after which the area will be opened to controlled exploitation, will be used as an effective solution (low input - low output) for the protection of large areas, since it results in a dense cover of vegetation of low financial yield. The protective forestry activities will be carried out in two counties (Yilong and Jialing) of Nanchong prefecture and all four project counties of Wanxian prefecture. The outputs during the project duration will be black locust (3,047 hectares), fuel wood (199 hectares) and mountain closure (12,734 hectares).
15. **Rural Roads** (4,655,000 workdays or 20 percent). The road component aims at completing important gaps in the existing network. The rural roads would be constructed to the national standard of the "Grade 4" highway, i.e., the category for township-to-township or township-to-village access roads. The roads will have an embankment width of 4.5 metres with a gravel surfacing three metres wide. Construction of 50 roads with a total length of 317 kilometres will be undertaken, of which 24 kilometres will be an upgrading of the existing tractor roads.



16. **Training** (6,408,000 training days equivalent to 1,266,000 workdays or six percent). Training will be provided to enhance project participants' (both men's/women's) technical skills in various aspects of agriculture, livestock, forestry and drinking water. Skills training in income-generating activities (IGAs) for women will be given in silk carpet weaving, cloth shoe making, machine sewing, handicrafts, chicken and duck-raising and vegetable processing. Under the WFP component of the social development activities (SDAs), training in health to 30,000 women and functional literacy to over 65,000 women has been included.

IFAD-supported main activities

17. **Seasonal Credit** (3.4 million dollars). Seasonal credit would be provided for production inputs such as improved seed and fertilizer in order to derive full benefit from the land improvement activities. Additional seasonal credit would also be made available to project area households for purchase of inputs on land not improved under the project. Amounts to be provided would be Y 100 per mu for paddy land and dryland improved under the project, Y 70 per mu for existing low- and middle-yielding paddy land and Y 50 per mu for existing sloping dryland.
18. **Livestock Development** (5.06 million dollars). This activity would consist of the provision of short- and medium-term credit for livestock development, including the purchase of young stock (of improved breed), construction or improvement of the shed or pen, purchase of compound feed, and veterinary care and medicine. A household would receive a loan for one pig or sow; two goats; or for one head of cattle shared among three households.
19. **Agricultural Services** (2.56 million dollars). The support to agricultural services includes activities that would enhance agricultural extension and training, and improve the supply of inputs and small equipment. Activities would include: a) the construction or rehabilitation of 75 township agriculture stations and the purchase of laboratory and training equipment; b) the provision of working capital to the township stations for purchase of stock to ensure the supply and distribution of inputs to farmers; c) the provision of credit to individual households or farmer groups for purchase of small equipment.
20. **Animal husbandry and veterinary services** (0.47 million dollars).
 - a) improvement of 53 township animal husbandry stations; b) development of 19 feed processing stations; c) improvement of county breeding stations.
21. **Economic trees and mulberry** (6.3 million dollars). IFAD loans will be provided to farmers for planting pear, plum, pomelo, navel orange, duzhong, jujebe or Chinese date, chestnut and ginkgo on 2,984 hectares and mulberry on 2,847 hectares.
22. **Women's income-generating activities** (2.3 million dollars). Loans generally of up to 200 Yuan per woman will be provided for specific income-generating activities.



ROLE AND MODALITIES OF FOOD AID

Functions

23. Food assistance will serve as: i) an incentive and income-substitute for farmers to participate in project activities; ii) part payment of wages for the skilled workers; iii) a catalyst for attracting government counterpart funding for development schemes.

Food input and commodity justification

24. Wheat is an appropriate commodity, taking into account local dietary habits. For food-for-work activities, a daily family ration of 3.25 kilograms of wheat is proposed. This has a local market value of 5.5 Yuan, which is in the range of the prevalent daily wage rate of five to six Yuan for unskilled work when such employment is available. The daily ration will be an adequate incentive for farmers' participation in the food-for-work project activities. In addition to the family ration, a cash supplement of three Yuan will be provided to the skilled workers. For training days, the food rations will be one kilogram except for women's functional literacy programmes, in which the entitlement will be 0.50 kilograms per training day. The duration of functional literacy training is two hours. All other training is four hours.

Savings

25. As a result of WFP food assistance, county governments will generate "savings" as they will no longer need to provide relief grain to food deficit farmers. These savings for the first year have been estimated at Yuan 5.1 million on the basis of a five-year average of relief grain distributions at current prices. The wheat prices will be reviewed jointly every year by the Government and WFP office. The savings, which are additional to the government contribution, will be used in consultation with the WFP office, mainly for handicapped persons, additional water supply schemes, health schemes and education of girls. Their generation and use will be monitored by Government of China and WFP.

PROJECT STRATEGY

26. The project will be implemented under the overall supervision of the People's Government of Sichuan province, under the leadership of the Vice-Governor for Agriculture. The Ministry of Agriculture (MOA) will act as the channel of communication between IFAD/WFP and the provincial/county authorities. MOA will also be a source of technical and other assistance. Project leading groups (PLGs) have been established and are headed by the Vice-Governor at the provincial level, the Vice Commissioners in the two prefectures and magistrates in each of the eight counties. The PLGs include representatives of: Finance, Agriculture, Water Resources, Health, Village and Town Enterprises (VTE), All China Women's Federation (ACWF) and Planning Commission and Forestry. Project offices (PO) will be established to implement the project and will proceed under the overall guidance



of the PLGs. Technical committees at provincial prefecture and county levels will assist the POs. At village level, the project activities will be planned and implemented by the village committees. For both the WFP and the IFAD project activities, the same management structure from the MOA to the village level will be used. Annual work plans will be prepared in advance.

27. WFP supplies of wheat will be delivered to Zhanjiang port in the southern part of China. The grain will be transported by train from Zhanjiang port to Chongqing and then by truck to the Nanchong project areas and by boat on the Yangtse river to the Wanxian project areas. The grain will be stocked initially by the County Grain Bureau and then transported to the project township stores. Adequate storage facilities exist at the county and township levels. Beneficiaries will receive their entitlements from the nearest township grain station or distribution point, usually once a month. A work/training book will be issued to each participant; all work and training performed will be certified by the village committee responsible.

BENEFICIARIES AND BENEFITS

28. Of the 244,000 households (907,000 persons) in the project, some 212,000 households (784,000 persons) will be direct beneficiaries. They will benefit either directly from food-for-work activities, credit facilities, training, or women's development activities, or indirectly from reduced soil erosion, improved access to water or rural roads. As described in the problem analysis, the target area and the target population have been selected through a successive filtration process, based on income and food security levels, and finalised by household surveys. Thus, the targeted areas and populations will be from among the most disadvantaged groups. Within these areas, efforts will be made to ensure that the poorest households are chosen as direct food aid beneficiaries, while at the same time considering other factors crucial for attaining project objectives (e.g., household labour availability and the need to maintain the integral nature of the land development schemes).
29. Substantial benefits are expected from the dryland improvement component when coupled with seasonal credit for production inputs. In Nanchong, annual grain production (from maize, sweet potatoes and wheat) is expected to increase from 5.7 to 9.9 tons per hectare by the fourth year following improvement; and in Wanxian from 5.4 to 9.0 tons per hectare. These production increases would be due to an increase in cropping intensity of about 180 to 220 percent, as well as yield increases. For paddy land improvement, annual grain production (paddy rice and wheat) is expected to increase from 4.95 to 6.75 tons per hectare, plus production of 450 kilograms of rapeseed. The production increases would result from an increase in cropping intensity of 150 to 200 percent (due to winter crop), as well as yield increases. The expected annual incremental production increase at full production levels that can be ascribed to land improvement activities and with seasonal credit for inputs would be about 3,540 tons of paddy rice, 6,860 tons of wheat, 850 tons of rapeseed, 7,850 tons of maize, and 9,220 tons of tubers (sweet potatoes and potatoes) expressed as grain equivalent (1:5). There would be an increase in straw and crop residue production of about 28,050 tons, plus the residue available following processing of grain and rapeseed, which is an important source of livestock feed.



Greater yield stability, with a reduced effect of such natural disasters as drought and flooding, is also anticipated.

30. Women will benefit from this project in two distinct ways: firstly, as partners in all activities undertaken in the project and, secondly, through a separate component designed specifically to increase their economic contribution to the family as well as their own abilities to make decisions within the family (through literacy, technical and health training). With regard to the level of women's participation within regular project activities, the participation rate will be: for land improvement 40 to 60 percent, irrigation construction 10 percent, road building 30 to 40 percent, livestock 90 percent, silkworm raising 80 percent, forestation and fruit trees 30 percent. It is expected that women's participation will be at least half of the food-for-work days and three-fourths of the training days.
31. The women's specific development programme has been designed following field surveys of perceived women beneficiary needs and an interactive design process with the All China Women's Federation (ACWF) and the eight counties concerned. This Programme is composed of two parts: income-generating activities (IGAs) and social development activities (SDAs). The former is to be financed through IFAD loans supported by WFP training and counterpart funding and the latter from a combination of WFP food aid, counterpart funding and savings from relief grain. IGAs in each county generally follow the same pattern of investment: one or two major activities (e.g., silk carpet weaving, cloth shoe production, machine sewing, vegetable processing), which can generally be undertaken by groups of women in their villages, and smaller investments. These investments, called open credit household income-generating activities (OCH IGAs), involve the disbursement of about 200 Yuan per woman. A number of these activities have been investigated, and they show promising returns on investment. The ACWF is being encouraged to develop group loans for OCH IGAs, not only to ensure repayment and reduce the administrative burden, but also to use the groups as focal points for social development.
32. SDAs include: maternal-child care programmes (including nutritional and health-care training of mothers, training of mid-wives, barefoot doctors and MCC workers and provision of medical kits and medication), adult literacy for women and a programme to finance a tuition waiver for promising young school children (mostly girls) whose parents can no longer afford to send them to school because of their poverty.

PROJECT SUPPORT

33. The WFP contribution will amount to 19 million dollars, IFAD 20 million dollars and the Government of China 31.5 million dollars, totaling 70.5 million dollars over five years. In addition, the Government will annually provide to the project the equivalent in funds that would have been spent on providing relief assistance to the project area. Of the total counterpart fund, Sichuan province will provide 30 percent, the prefectures 30 percent and the counties 40 percent.



34. Monitoring and evaluation (M&E) of project activities will be carried out in line with the standard procedures which WFP has developed for its projects in China. These procedures, which have been refined over the past years to improve the validity of data and their usefulness to management, include annual updating of beneficiary socio-economic profiles and tracking of key project-specific indicators. In the present project, these key indicators focus on household food security and income levels and will include measures of i) crop and livestock production; ii) household income (or proxy indicators related to expenditure); and iii) income of women taking part in IGAs. The WFP standard procedures will be adapted as appropriate to permit full collaboration with IFAD, including coordination of field visits, use of consultants and funding. It is expected that a team approach can be developed building on IFAD's approach of working with staff of the United Nations Office of Project Services (OPS) supplemented by national consultants.
35. In order to ensure effective implementation of the M&E system, budgetary provision of 27,500 dollars annually has been made to cover counterpart training; updating of computer hardware/software; data collection and analysis; and engagement of consultants to supplement WFP staff in the establishment and operation of the procedures. An additional 50,000 dollars has been allocated to cover gender-related studies and any technical studies, should the need arise during implementation.
36. The Project Office at the prefecture level will be responsible for report preparation, based on county-level reports. The commodity report will be prepared on a quarterly basis. Other reports will be prepared semi-annually on the utilization of workdays, counterpart funds and savings, physical achievements, quality assessment and women's participation. All reports will be submitted to the WFP office through the MOA. Furthermore, the project will receive an annual audit from the provincial audit office.

PROJECT FEASIBILITY AND SUSTAINABILITY

37. The project, as proposed by the Government, was thoroughly analyzed and re-formulated by a multi-disciplinary project preparation mission, composed of well qualified Chinese national consultants, organized by the FAO Investment Centre and financed by IFAD and WFP (through the UNDP Umbrella Fund). This mission spent over three months in the field and was able to conduct in-depth household surveys to ensure targeting of both IFAD and WFP interventions to meet beneficiary needs, and closely analyze the technical proposals for their economic and environmental soundness, as well as other viability issues. Experience gained from previous IFAD and WFP projects has been used to improve this joint project. The diversity of activities planned to be supported under the WDC is the result of a study conducted of WID components in ongoing WFP projects and similar IFAD experiences, as well as of the findings of the preparation mission.
38. The indicative economic rate of return of the overall project over 15 years is estimated at 39 percent. Excellent organizational arrangements are already in place; adequate supervisory, technical and extension staff are available. Technical and



extension services for agriculture and animal husbandry will be further strengthened, especially at the township level, through IFAD support as described earlier. Technical assistance for specific purposes will be available through the UNDP umbrella project. Similarly, financial and material inputs are also assured. Of an estimated 600 workdays available annually for an average household, some 430 days are required for farm labour, livestock rearing and household duties, leaving a balance of 170 days. In the food-for-work activities, an overall average participation of 20 workdays per household per year (with a maximum of 25 workdays in years two and three) is estimated. Consequently, no shortage of labour is anticipated for the project to run its course.

39. The project summary draws on the findings and recommendations of an appraisal mission (November-December 1995) in which IFAD also participated. They were endorsed by the Government, and several have been built into the preceding text. The mission also recommended some site-specific surveys for irrigation schemes; joint planning and coordination by the Water Conservancy and Agricultural Bureaus of the paddyland improvement schemes in Nanchong; continuation of field trials and variety tests; testing of additional forestry species; organization of demonstration plots; establishment of additional forestry nurseries; and conducting market research in citrus fruits. The mission also recommended that arrangements be made on a sampling basis to study the impact of the project on agricultural production and income. With regard to women's participation, the mission was assured that due recognition would be given to the already considerable role of women in the project areas and that although a certain degree of division of labour based on gender might continue, the overall participation by women in the project activities would be at least 50 percent. Women would be direct recipients of the food ration based on their project participation. Similarly, loans to women for the income-generating activities would be provided only upon their own signatures. The mission further recommended that women's participation in the management positions be strengthened; a representative of the Women's Federation be included in the County Project Management Office on a permanent basis; and in the village implementation/technical committees, the services of the Cooperative Women's Representatives and others be increasingly utilized. More intensive training and resources need to be provided to strengthen Women's Federation from the provincial to village level. A simplified (140 class hours) literacy programme that is more closely related to the day-to-day life of the participants should be developed.
40. For maintenance of water conservation schemes, a water fee would be paid by farmers to the village committee in the order of Y 14 per mu. In some cases, this fee would be levied as an equivalent amount of paddy rice. The proceeds, along with voluntary village labour, would go towards maintaining the schemes. Normally such fees cover 60 percent of the operation and maintenance (O&M) costs. The appraisal mission has recommended that consideration be given by the Government to gradually phasing out the balance of the 40 percent subsidy on O&M. In view of the poverty of the project areas, it does not fit into the Government's social policy to ask the beneficiaries to meet the capital costs. Rural roads completed by the project will become part of the provincial road network and as such would qualify for the same O&M standards of the Transportation Bureau as other class-four roads.



Risks

41. The mission took note of the information and assurance provided by the Government that the Three Gorges Dam being built on the Yangtse river would not affect the project areas. The high rates of inflation in China have recently shown signs of decline; although a substantial contingency factor in the Government counterpart funds has been built in, inflation in the future may pose some small risk.

Environment

42. The reintroduction of vegetative cover, particularly on steep slopes that have had arable crops, is an essential step in controlling erosion and reducing soil loss. This result will be enhanced by the technique of contour planting, to be used in protective plantations. For those fruit trees that are established using a terracing technique, there will be a direct impact on reducing erosion. Livestock and crop production activities interact as part of the farming system in the project area, with animals providing manure for soil fertility improvement and using crop residues as their major feed source. Regulations governing the production and feeding of grazing animals (goats and cattle) will be developed under the project, which could result in positive progress toward the protection of forest and grassland areas.
43. Those drinking water ponds which would also provide livestock watering and some garden irrigation would be equipped with a sand filter and a sink for the application of disinfectants. The Bureau of Health would participate in the relevant leading group/technical committee meetings, and a provision has been made for a small amount of training to ensure proper hygiene control of drinking water supply schemes.

DISINCENTIVES, DISPLACEMENT AND DEPENDENCY

44. The WFP annual wheat supplies under this project will be 15,235 tons. Added to shipments planned under the operational and pipeline projects, total annual WFP wheat supplies to China will amount to 100,000 tons, representing only 0.1 percent of average wheat production (99 million tons) and less than one percent of average wheat imports (10 million tons). Therefore, there is little risk that the implementation of the project will have any adverse effects on either production or trade.
45. Sichuan is a cereal-deficit province and, consequently, during 1994 imported 2.51 million tons of cereals from other provinces. The project areas import 55,000 tons of grain annually. An annual average of almost 5,000 tons of relief grain is distributed in the project areas. The per-household net availability from local production in the project townships is 780 kilograms of grain. Thus, the vast majority of beneficiaries are constantly in food deficit. WFP assistance to beneficiaries, which will average about 70 kilograms of wheat per household per year, is not expected to create any disincentive to local production or markets, since, to a large extent, it will fill the gap between requirement and availability. There is also no risk of creating



dependency on food aid, as beneficiaries will receive food aid for short periods only, and the project is strictly limited in time.

PROJECT COSTS

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

| PROJECT COST BREAKDOWN | | | |
|---|----------------------------|---------------------------------|----------------------------|
| | <i>Quantity (tons)</i> | <i>Average cost per ton</i> | <i>Value (dollars)</i> |
| WFP COSTS | | | |
| A. Direct operational costs | | | |
| Commodity ¹ | | | |
| – Wheat | 76 178 | 180 | 13 712 000 |
| Ocean transport | | | 2 692 900 |
| Subtotal direct operational costs | | | 16 404 900 |
| B. Direct support costs | | | |
| – Monitoring and Evaluation | | | 137 500 |
| – Gender-related and technical studies | | | 50 000 |
| Subtotal direct support costs | | | 187 500 |
| Total direct costs | | | 16 592 400 |
| C. Indirect support costs (14.5 percent of total direct costs) | | | 2 405 900 |
| TOTAL WFP COSTS | | | 18 998 300 |
| IFAD COSTS | | | |
| – Credit | | | 17 478 000 |
| – Technical support | | | 1 385 000 |
| – Training | | | 119 000 |
| – Project management | | | 997 000 |
| TOTAL IFAD COSTS | | | 19 979 000 |
| GOVERNMENT COSTS | | | |
| – Food handling, transportation and distribution | | | 4 156 800 |
| – Dryland improvement | | | 7 247 600 |
| – Paddyland improvement | | | 667 600 |
| – Protective forestry | | | 685 400 |
| – Rural roads | | | 2 211 800 |
| – Drinking water supply | | | 939 400 |
| – Training | | | 1 392 900 |



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|-------------------------------|
| PROJECT COST BREAKDOWN |
|-------------------------------|

| | Average cost per ton | Value (dollars) |
|---|-------------------------|--------------------|
| - Government counterpart fund for IFAD | | 7 661 600 |
| - Contingencies | | 6 521 800 |
| TOTAL GOVERNMENT COSTS | | 31 484 900 |
| TOTAL PROJECT COSTS (WFP and others) | | 70 462 200 |

WFP costs as a percentage of total project costs: 27 percent

¹ 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

47. Preparing a joint project with IFAD has increased the amount of coordination and consultation. In addition, one county (Yilong county) is targeted as a future JCGP joint project (like the current project in Yunnan), for which the WFP office is in contact with UNDP, UNICEF and UNFPA. Staff of various Chinese institutions were involved in project preparation. FAO has collaborated through the Investment Centre, as has UNDP through its Umbrella Fund. Comments of FAO, ILO, UNESCO and WHO have been taken into account in finalising this document. CSD clearance will be sought.

RECOMMENDATION OF THE EXECUTIVE DIRECTOR

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



ANNEX

PROJECT OUTPUTS AND WORKDAYS

| Components and activities | Unit | Average worknorm per unit | Outputs | Workdays | Percentage of total |
|-------------------------------|------------------|---------------------------|---------------|-------------------|---------------------|
| DRYLAND IMPROVEMENT | | | | | |
| Nanchong | | | | | |
| Terracing/soil deepening | | 1 380 | | | |
| Irrigation/drainage | | 770 | | | |
| Subtotal | ha | 2 150 | 1 990 | 4 277 000 | |
| Wanxian stone terraces | | | | | |
| Terracing | | 2 220 | | | |
| Irrigation/drainage | | 600 | | | |
| Subtotal | ha | 2 820 | 2 860 | 8 065 200 | |
| Wanxian earth terraces | | | | | |
| Terracing | | 675 | | | |
| Irrigation/drainage | | 600 | | | |
| Subtotal | ha | 1 275 | 600 | 765 000 | |
| Total | ha | | 5 450 | 13 107 200 | 55.9 |
| PADDYLAND IMPROVEMENT | | | | | |
| Total | ha | 530 | 1 890 | 1 001 700 | 4.3 |
| DRINKING WATER SUPPLY | | | | | |
| Total | No. of HH | 21 | 53 600 | 1 125 600 | 4.8 |
| PROTECTIVE FORESTS | | | | | |
| Black locust | ha | 480 | 3 047 | 1 462 400 | |
| Fuelwood | ha | 480 | 199 | 95 460 | |
| Mountain closure | ha | 57 | 12 734 | 725 820 | |
| Total | | | 15 920 | 2 283 680 | 9.7 |
| RURAL ROADS | | | | | |
| Rehabilitation | | | | | |
| Wanxian | km | 6 130 | 24 | 147 000 | |
| New roads | | | | | |
| Nanchong | km | 14 700 | 148 | 2 175 000 | |
| Wanxian | km | 16 100 | 145 | 2 333 000 | |
| Subtotal | km | 15 400 | 213 | 4 508 000 | |
| Total | km | | 317 | 4 655 000 | 19.9 |



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| PROJECT OUTPUTS AND WORKDAYS |
|-------------------------------------|

| Components and activities | Unit | Average worknorm per unit | Outputs | Workdays | Percentage of total |
|---------------------------|------|---------------------------------|----------------------|-------------------|------------------------|
| TRAINING* | | Persons | Training days | | |
| Agriculture | | 197 000 | 548 500 | 168 769 | |
| Livestock | | 185 000 | 232 000 | 71 385 | |
| Forestry | | 138 297 | 414 890 | 127 658 | |
| Drinking water | | 53 600 | 53 600 | 16 492 | |
| Women's skill training | | 135 715 | 542 860 | 167 034 | |
| Women's literacy | | 65 520 | 4 586 400 | 705 600 | |
| Women's health training | | 30 000 | 30 000 | 9 230 | |
| Subtotal | | 805 132 | 6 408 250 | 1 266 168 | 5.5 |
| Total workdays | | | | 23 439 400 | 100 |

* Valued at one kilogram of food per training day except for literacy training for which 35 kilograms of food would be provided based on 0.5 kilograms for two hours training for 70 days (equivalent to 17.5 full days training per woman).

