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Summary evaluation report¹ on ex-post evaluation² of the impact and sustainability of selected WFP-assisted projects in China (May - June 1996)

¹ A full report, in English only, is available upon request.

² The mission was composed of an evaluation officer, mission leader, WFP; an agricultural economist, FAO; a sociologist, FAO; and an irrigation engineer, WFP Bangladesh.

ABSTRACT

WFP-supported projects in China have had on the whole a very favourable record in terms of their implementation and as regards their impact on beneficiaries during the projects' early years. Less is known about the sustainability of these initiatives. This evaluation focuses on the sustainability of project effects in selected cases.

WFP assistance, which represented an important part of the total investment (20 to 30 percent) of the four schemes examined, has been of capital importance to the timely development, implementation according to stated objectives, and completion of the projects. These were completed in 1987 and 1988. At present, all four function well. Socio-economic indicators point towards a dramatic improvement in the living conditions of beneficiaries, both original inhabitants and new settlers, who were previously living below a subsistence level and who were rightly considered to be among the poorest farmers in the country.

While the economic sustainability of the two projects subjected to an on-the-spot evaluation (China 2639 and 2697) has been questioned on several occasions in the past, the ex-post mission established that their economic internal rate of return (EIRR) is significantly above the opportunity cost of capital in China and that they are bankable and replicable. Moreover, since the end of WFP assistance, the Provincial Government has created a Project Management Office to manage the irrigation systems and monitor the progress of each project. The Government is also going ahead with the expansion of all projects. The desk review and additional data provided on the other two projects (China 2744 and 3146) confirmed the quite positive findings of previous evaluations.

This summary evaluation report concludes that - at least in the case of the projects examined - WFP-supported activities in China which follow the "household responsibility policy" introduced in the early eighties can be rated successful with respect to their institutional and environmental sustainability, and the sustainability of project benefits. An economic sustainability analysis conducted on three of the four projects provided positive results with respect to sustainability at both the micro- and macro-level.

NOTE TO THE EXECUTIVE BOARD

This document is submitted for consideration to the Executive Board.

Pursuant to the decisions taken on the methods of work by the Executive Board at its First Regular Session of 1996, 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.

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.

The WFP focal point for this document is:

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Should you have any questions regarding matters of dispatch of documentation for the Executive Board, please contact the Documentation and Meetings Clerk (tel.: 5228-2641).



BACKGROUND

1. Recent evaluations have given favourable overall ratings to WFP-supported projects in China. Activities were implemented on schedule; output targets were usually reached as planned and projects could be completed on time. However, the sustainability of these initiatives was less well understood and documented. WFP's Executive Board therefore requested further information on these aspects. Four projects that are typical of WFP's support to China were chosen for this evaluation.

PROJECTS SELECTED

2. Two WFP-assisted projects, both in Gansu Province, were selected for an on-the-spot review by the evaluation mission. These are: project China 2639 - "Xingpuzichuang irrigation project, Jingyuan County" and China 2697 - "Irrigation in three counties". They were completed in 1988 and in 1987, respectively. With regard to project 2697, the mission focused its analysis on the Liuchuan sub-project. These projects are representative of the support given through WFP assistance to integrated agricultural development in very poor counties of the Loess Plateau, with special emphasis on irrigation. Other determining factors for their selection are:
 - a) both projects include a large proportion of settlers mostly originating from hilly villages, where their living conditions were below a subsistence level;
 - b) since the appraisal stage the projects have been under question in terms of economic sustainability because of the very high initial investment and also because of the substantial costs of maintaining and operating the irrigation systems, which result from the need to lift water by 407 metres in the case of project 2639 and 295 metres in that of the Liuchuan sub-project of project 2697; and
 - c) the sectoral evaluation of WFP-assisted hydro-agricultural activities in China, which was undertaken in 1991, expressed serious reservations on the Liuchuan sub-project of project 2697, in particular with regard to low standards of construction, inadequate drainage, poor land-levelling, and the potential hazard of salinity.
3. Two other projects which had been evaluated previously were also reviewed by the evaluation mission with up-dated documentation. They are: a) project China 2744 - "Improved land use of the Loess Plateau, Mizhi County, Shaanxi Province" in Central-Northern China for the development of rain-fed areas (completed in September 1989) (CFA:35/SCP:10/3-D/Add.1); and b) project China 3146 - "Improvement of low-yielding lands, Anshun Prefecture, Guizhou Province" in Southern China for the development of command areas (completed in December 1994) (CFA:33/SCP:8/3-D/Add.2). The detailed and valuable briefing information received by the mission confirmed the positive findings of the previous missions with regard to the impact and sustainability of these projects, which are still being monitored by Project Management Offices. Furthermore, the respective Provincial Governments have continued to strengthen and enlarge the scope of these projects.



CONCLUSIONS

4. The four projects evaluated were implemented in the mid-eighties when the economy, in particular the agricultural sector of China, was undergoing significant transformations. Changes are still going on. Since the introduction of the household responsibility system in the early eighties, agricultural productivity and total production have shown remarkable growth rates. The projects have benefited from, as well as contributed to, this positive development.

Institutional sustainability and management

5. In each of the four projects reviewed, a follow-up Project Management Office was established. These deal with monitoring, coordination of administrative and technical services, and with water management in the case of irrigation projects. This type of organization has proved to be very useful and the Government has continued to finance the enlargement of the projects' scope.
6. The developed projects operate well from a technical point of view. An appropriate organizational structure for water management was established, dealing with operation and maintenance issues up to the field level, thus ensuring a reliable water supply and distribution for agriculture.

Environmental sustainability

7. Attention has been paid to the recommendations made by the irrigation expert during the 1991 sectoral evaluation. Based on available resources and knowledge, measures have been taken, especially with regard to problems related to land levelling and salinity.

Sustainability of benefits

8. Various socio-economic indicators, such as food grain availability and surpluses, the increase of cash crops and per capita income, nutrition diversity, and improved accessibility to services such as drinking-water, electricity, transport facilities, grain mills, schools and health centres of a good standard, all point to the remarkable direct or indirect achievements of the four projects. Significant numbers of spacious and well-built houses, generally equipped with coal stoves and frequently with television sets and other modern commodities, indicate the well-being of the households who were directly involved in the projects, whether it be original inhabitants or settlers from other areas.
9. Although **women** were not explicitly pointed out as a specific target group at the time of appraisal, their style of life has been greatly modified by the projects. Women do have more agricultural work than before, but they currently enjoy food security and they have less hard and boring chores to carry out (fetching of water, straw or wood, and processing of grains, for example). Children in general, and girls in particular, have better educational opportunities: not only is the quality of the teaching higher, but parents can afford to keep them longer in school.



10. In the two projects visited, a small number of **settlers** (estimated at five percent of the total), who had arrived only recently and who were very poor upon arrival, are still struggling to make a living. In this respect, young couples with a newborn child appear especially vulnerable, for the mother finds it difficult to do farm work and the father is prevented from carrying out any off-farm activities. It is nevertheless expected that people from this category will overcome their initial difficulties in three to four years. Otherwise, the vast majority of settlers are undisputedly far better off than they were 10 years ago, even if most of them have not yet had time to make major productive investments outside agriculture, unlike some of the original inhabitants. During these 10 years, settlers' savings went mostly into the purchase of basic agricultural equipment and the construction of a new house, a very costly investment. There are, however, noticeable exceptions, especially among the settlers who arrived first and those who came with some assets: they show great dynamism and entrepreneurial skills and are prepared to take risks to start new enterprises in the fields of food processing, transport or construction. It can be expected that this trend will become more and more important as settlers complete their most basic investments. It could be foreseen that, in a not too distant future, settlers will contribute significantly to developing off-farm activities and creating new jobs. By reducing the demographic pressure on land in most of the original villages of the settlers, both projects have also indirectly contributed to improving the food security situation, and to some extent to the well-being of farmers who could not directly benefit from the irrigated land.
11. The stated objectives of the projects, of raising food production, improving infrastructure and relieving poverty, have therefore largely been achieved. Moreover, all projects are helping the Government to reach its long-term targets for agriculture, namely to: a) increase the production of food, feed and industrial crops; b) raise the income of the rural population; and c) create farm and non-farm opportunities in rural areas.

Economic sustainability

12. The ex-post economic analysis has shown that the projects are economically sound: the economic internal rate of return (EIRR) is 14 percent for project 2639, 15.9 percent for the Liuchuan sub-project of project 2697 and 17 percent for project 2744. Moreover, in all projects the indices of productivity and improvements in the standard of living are such, that it is foreseen that beneficiaries will continue to maintain sustainably their commitment to the changes that the projects have contributed to introducing. Other positive indicators of sustainability are the proven willingness of beneficiaries to invest a large part of their income in the construction of their new houses and improvements in their farms. The project areas are now fully integrated into the economy of the country, since more than half of the agricultural produce is marketed.

LESSONS LEARNED

13. The projects evaluated are sustainable because they are based on economically and environmentally viable production models, have a steady technical and organizational know-how at the local level, and continue to provide lasting benefits to those involved in the implementation phase.
14. For future projects of this type, it is however necessary to ensure that careful attention be given to drainage requirements before implementing an irrigation project, especially in areas where the soil contains high amounts of salt. In areas already under irrigation, the



ground-water level should be monitored, together with the intensity and magnitude of the salinity problem.

15. Also, for those projects where settlers represent a substantial proportion of their villages of origin, project impact should be assessed both in resettlement areas and in the original villages.
16. Finally, in agricultural development projects in which the land available to each farming household is very limited and focused mostly on food and cash crops to meet their immediate needs, farmers often tend to invest in small animals, including sheep, which are taken to mountainous areas outside the project site. It would be important to monitor and, if necessary, control the increase in animal population, especially in arid zones, to prevent the risk of exceeding the carrying capacity of the natural pastures.

ASSESSMENT: SOME EVIDENCE OF SUSTAINABILITY

Institutional sustainability and management

17. **Irrigated areas.** The completed projects, 2639 and 2697, function well. In the case of project 2639, 11,400 hectares is currently fully irrigated while the designed area was 10,000 hectares and WFP was directly involved with the development of 6,067 hectares. In project 2697 WFP was involved in the levelling of 3,267 hectares, but at present 4,267 hectares is irrigated out of the designed irrigation area of 5,000. In both areas actions are undertaken in order to increase the water flow and optimize water use to further expand the irrigated area. With project 2744, productivity has increased considerably after terracing.
18. The project offices, established during project implementation, have been transformed into project water management offices. These handle the timely delivery of irrigation water to the farmers, control the operation of the infrastructure, and coordinate and supervise the maintenance of the assets created. At the level of the lateral canal, farmers are involved through chosen representatives. This organization appears sufficient and effective, and commitment to its proper functioning was noticed at all levels concerned.

Environmental sustainability

19. The water pumped from the Yellow River contains a considerable amount of sediment. Although the analysis of constructing a sediment trap and other alternatives was advised earlier, no such analysis was found in written form. In practice, sediment is not perceived as a major problem. However, in project 2639 the inside of the pumps was painted with a resistant coating material; increased efficiency of the pumps was reported.



20. Project 2697 had been criticized for inappropriate land levelling. Action was taken to improve soil quality of the land concerned. Soil with a high gravel and sand content was removed with project equipment and farmers' labour input. It is expected that within a short time, the last 67 hectares will be rehabilitated.
21. With regard to saline soil, it was reported that the situation had improved. A total of 154 hectares was abandoned because of the salt content of the soil. In some areas drainage is currently being provided in order to diminish the problem. Some affected areas have been treated since last year with extra irrigation siftings before the irrigation season, in order to leach excessive salt. The findings are positive; however, in some places this method cannot be applied directly because of the lack of drainage facilities.
22. Water saving in order to increase the area under irrigation and guarantee irrigation is a major goal for both projects at present. It seems that besides the financial investment needed for the purchase of equipment for drip and sprinkler irrigation, the high content of sediment in the irrigation water prevents the introduction of these types of irrigation. Other alternatives for water saving may be found in an improved water distribution efficiency through reprofiling and lining the lateral and field canals. The farmers in the irrigation areas are in general very receptive for optimization of the production, as is evidenced by their quick adoption of the intercropping system and crop diversification. They are likely to face an increase in the water fee and could therefore be in favour of an investment in lining when it will be clear to them that this will reduce the water cost.
23. Terracing in the other two projects has reduced erosion.

Sustainability of project benefits

24. With the exception of very marginal cases, food self-sufficiency has been achieved fully. By reducing the land pressure, both projects have also indirectly contributed to the improvement of the food situation in the settlers' villages of origin. Previously, the majority of beneficiaries were not self-sufficient in food. Most of them had to rely on relief or resold grains. In project 2639, the per capita grain output reached 473 kilograms in 1995 (against 92 kilograms before the project), whereas in project 2697, it has increased from 101 to 664 kilograms. Similar results have been obtained with the other two projects.
25. The livestock population has increased and become slightly more diversified. This increase should be interpreted carefully, for it may be related mostly to the rise of households in the area due to the influx of large numbers of settlers. According to the farmers themselves, the most spectacular change concerns the pig population. Most households now have enough crop residues to raise at least one or two pigs a year, and significant numbers of families have sheep and poultry. When sheep flocks exceed eight or 10 animals, they are sent most of the year to mountainous areas for grazing.
26. For a majority of households, income originates from a blend of annual crop production (which is partly consumed, the rest being sold), the sale of animals and off-farm employment. Although the marketing of fruits is just starting, it may become an important and regular source of revenue in the near future, especially in project 2697. The sale of trees (poplars, for example) should also start soon and bring extra cash to some households. The value of animal production represents an important share of the gross value of agricultural production (about 34 percent in project 2639 and 26 percent in project 2697).
27. Given the small size of the farms, the total amount of labour required for agricultural production (229 workdays in project 2639 and 259 in project 2697) can normally be provided by one adult, except in sowing and harvesting periods. The other adult in the



household (normally the man) is thus free for off-farm employment during several months of the year.

28. In real terms, the net per capita income in project 2639 was 342 yuan¹ at the beginning, as against 1,707 yuan in 1995, whereas in project 2697 it increased from 410 to 2,530 yuan. In other words, the average real income per person was well below the poverty line (600 yuan) when both projects started. It is currently about three times higher in project 2639 and four times higher in project 2697.
29. Indirect evidence indicates that in all projects nutrition has improved substantially through abundance and diversity. At present, farmers eat sufficient quantities of cereals. They consume many different types of vegetables and most can afford to kill a pig once a year, which gives them a reliable source of meat for seven to eight months. Rice, oil and, occasionally, chicken or eggs, also add some diversity to the previous monotonous diet.
30. **Housing and other assets.** At first, most settlers had to live in temporary shelters. According to project authorities, at least 60 to 70 percent of the households are at present living in spacious (on average 20 square metres per person) and well-built houses. The remaining 30 to 40 percent - mostly settlers - are in the process of collecting building materials and are about to start the construction of their new house. Besides, all farmers in both project areas use coal regularly for cooking and for heating in the winter, not only because transport facilities are better than before, but also because they can now afford to buy coal, which was rarely the case before. TV sets, tape recorders and sewing machines are extremely common (roughly 60 percent of the households are reputed to have at least one TV set). Refrigerators and washing machines are also found in the wealthiest households.
31. **Access to services.** Projects 2639 and 2697 both provided food aid to settlers for the construction of cisterns. At present, all households are equipped with at least one cistern. The water, which comes from the irrigation canals, is easily accessible and free of excess fluoride. It should nevertheless be purified, settled and sterilized. As for schools and health services, they have increased substantially and the quality of the teaching offered in the new schools is said to be much higher than that of the old schools in mountainous areas. In all project areas school enrolment is close to 100 percent. It appears, however, that one major difference is that children, especially girls, stay longer at school and go in larger numbers beyond the compulsory nine years that the Government is currently enforcing. As in the case of electricity, none of the projects has had any direct influence on health and school services. However, the projects have acted as a trigger mechanism to stimulate the Government to take action and promptly implement such facilities on the projects' sites. Farmers from the project areas are also in a better financial position to take advantage of such services on a continuous basis.

¹ All monetary values are expressed in United States dollars, unless otherwise stated. One United States dollar equalled 8.32 yuan in June 1996.



32. Sources of off-farm employment vary from one project to another and according to skills. In project 2639 a good proportion of the non-skilled labour force works in coal mines, whereas in project 2697 farmers find most of their job opportunities in the nearby towns or the rare neighbouring metal mines. Because of the large number of settlers building new houses in both projects, many people with skills related to small-scale construction work (masonry, carpentry) have been able to find temporary work in the vicinity of their village. However, construction work usually takes men outside their immediate area, sometimes to distant parts of China, and some have to stay away for several months in a row.

Economic sustainability

33. A detailed analysis was carried out for projects 2639 and 2697. However, the data for projects 2744 and 3146 suggest analogous findings. In all projects, indices of productivity and improvements in the standard of living are such that it is foreseen that beneficiaries will continue to maintain sustainably their commitment to the changes that the projects have contributed to introducing. Another important indicator of sustainability which has been observed in these two projects is the demonstrated willingness of the beneficiary households to invest part of their increased farm income for the further development of their farms.
34. The economic sustainability of a project is measured by its capacity to contribute to the economic growth of the country without the need for additional public resources (in the form of either capital investment or input subsidies) to ensure its financial viability. The most important indicator of the economic sustainability of a project is its economic internal rate of return (EIRR), which is the maximum interest rate that a project could pay for the resources used if the project is to recover its investment and operating costs and still break even. The EIRR is then compared to the opportunity cost of capital in the country, which in the case of China is usually assumed to be 12 percent.
35. No detailed economic analysis of the two projects visited by the mission had been carried out in the past. Both projects had been designed in the late seventies mainly on political and social grounds to alleviate the dramatic situation of poverty of the beneficiary households who were engaged in rain-fed agriculture and sheep raising under the harsh climatic conditions of the Loess Plateau. The sustainability of these projects had been questioned from the appraisal stage, mainly because of the high cost of lifting water from the Yellow River by 407 metres for project 2639 and 295 metres for project 2697.
36. The two projects are self-contained and autonomous, since each has its own set of pumping stations and irrigation network. Because of better planning and design, the implementation of project 2639 has been more rapid and effective than that of project 2697. In fact, the full development of the irrigated area was carried out in eight years for the former, while it required 13 years for the latter.
37. The economic analysis of the two projects has been conducted by adopting a prudent approach. In general, most costs are probably overestimated and some benefits are underestimated. This implies that the real EIRR for each of the two projects is probably higher than that estimated in this document. Owing to the relatively long implementation period of the two projects, the economic analysis has been carried out over a period of 30 years. The analysis concerns the entire government projects, and not those large portions of them which were assisted by WFP.
38. Accurate records of annual investment costs to the Government for each of the two projects have been provided by the respective Project Management Offices. These costs have been



updated to 1995 on the basis of the Index of the exchange rate between the yuan and the United States dollar; this choice was dictated by the fact that the more suitable Price Index of Industrial Commodities was not available to the mission. The use of the derived inflator has most likely led to an overestimation of government investment costs by 10 to 15 percent. The updated total investment costs for the two projects are as follows:

	Project 2639	Project 2697 (Liuchuan sub-project)
	<i>million yuan</i>	
Government investment	352.5	108.1
Total WFP costs	88.4	46.7
Total investment cost	440.9	154.8
WFP costs as percentage of total cost	20 percent	30 percent

39. **Government savings.** Before the commencement of WFP assistance for projects 2639 and 2697, the Government had to deliver annual quantities of 3,300 tons and 2,860 tons, respectively, of resold grain to the households in the project areas and spend a large amount of money (at current prices not less than three million yuan for project 2639 and 1.8 million for project 2697) for water transportation and relief grants to the neediest families. It has been conservatively assumed that without the projects the Government would have continued to provide, for at least five years after the termination of WFP assistance, the equivalent of about 3,000 tons (project 2639) and 1,800 tons (project 2697) of wheat to the population of the project areas before viable alternatives for their livelihood could be found. The estimated total amounts of government savings are 45 million yuan for project 2639 and about 25 million for project 2697.
40. **Benefits.** Both projects have generated direct, indirect and intangible benefits. The direct benefits are the dramatic increase in agricultural production in the project areas and the elimination of relief assistance by the Government which was of vital importance for the majority of the beneficiaries before the projects were implemented. The estimation of the gross value of agricultural production was based on a detailed analysis of the evolution of cropping patterns, changes in water norms for the various crops and technological improvements that have been adopted in the project areas during the last decade. Both projects can be considered to be in full development starting in 1993, with the possible exception of the orchards planted in project 2697. An important indirect benefit for both projects has been the reduced pressure of population on the rain-fed land in the villages of origin of the large number of households who have resettled in the newly irrigated areas. This has brought some improvement in the meagre farm income of the households that continue to live in those villages.
41. **Costs of production.** For the purpose of the economic analysis of the two projects, the costs of production are given by the sum of: a) the labour cost; b) the cost of agricultural inputs; and c) the economic cost of water (operation and maintenance costs).
42. A specific analysis has been carried out to determine the cost of water, which is highly subsidized by the Government, since farmers pay only 27 percent of the real cost of water in project 2639 and 30 percent in project 2697. However, the policy of subsidizing electricity for lifting irrigation water is not likely to change in the near future because the



Government considers it a powerful incentive for the promotion of agricultural production in favour of some of the poorest segments of the rural population.

43. **EIRR.** The results of the computations for the two projects are an EIRR of 14 percent for project 2639 and of 15.9 percent for project 2697.
44. Some possible implications of the economic analysis of the two projects are as follows: In the plateau where project 2639 is located, there are at least 30 to 40,000 hectares of potentially irrigable land almost equally divided between Gansu Province and Ningxia Region. Provided sufficient water is available from the Yellow River, that land could change the future of an additional 60 to 80,000 households now living in conditions of extreme poverty in the surrounding mountains. The economic viability of implementing such a scheme has been proved by project 2639. In project 2697, the Project Management Office has made plans (already technically approved by the Provincial Authorities) to expand the irrigated area by 1,400 hectares. This initiative is certainly economically viable and deserves to be supported.
45. **Changes in bank deposits and credits.** In the early eighties, before the implementation of the two projects, only a small number of people deposited money in the local credit cooperatives, and those who could afford it (perhaps 10 to 15 percent) borrowed money on a short-term basis in order to buy basic commodities for their households. The evolution in the volume of credits and deposits between 1985 and 1995, and of the percentage of households that utilize the services of credit cooperatives, illustrates the dynamism of the economic life in the project areas. It also shows the degree of their integration into the market economy, which now absorbs more than 50 percent of agricultural production.



ANNEX I

**NET VALUE OF AGRICULTURAL PRODUCTION FOR ECONOMIC
ANALYSIS - YUAN PER HECTARE**

Project China 2639					
Category	Period				
	1985-89	1990	1991	1992	1993 onwards (full development)
Gross value of agricultural production	9 886	11 98	14 09	16 195	18 298
Cost of labour	2 448	2 48	2 51	2 547	2 580
Cost of agricultural inputs	1 460	1 81	2 16	2 520	2 873
Economic cost of water ¹ (operation and maintenance)	3 060	3 06	3 06	3 060	2 754
Net value of agricultural production	2 918	4 63	6 35	8 068	10 091

Project China 2697							
Category	Period						
	1983-87	1988	1989	1990	1991	1992	1993 onwards (full development)
Gross value of agricultural production	8 034	9 534	11 054	12 60	14 16	15 77	17 373
Cost of labour	2 352	2 360	2 400	2 450	2 500	2 54	2 592
Cost of agricultural inputs	1 230	1 430	1 640	1 950	2 260	2 58	2 833
Economic cost of water ¹ (operation and maintenance)	1 800	1 800	1 800	1 800	1 800	1 80	1 620
Net value of agricultural production	2 642	3 944	5 214	6 40	7 60	8 82	10 328

¹ In the early nineties the water supply per hectare was changed from 6,000 m³ to 5,400 m³.



ANNEX II

**ECONOMIC ANALYSIS OF WFP-ASSISTED PROJECTS
CHINA 2639 AND CHINA 2697 (LIUCHUAN SUB-PROJECT) -
ALL FIGURES AT 1995 PRICES**

Year	Project 2639 ¹			Project 2697 ¹ Liuchuan sub-project		
	Total net investment costs	Incremental net value of Agricultural production	Incremental net benefits	Total net investment costs	Incremental net value of agricultural production	Incremental net benefits
(,000 yuan)						
1981	(45 360)	-	(45 360)	(46 324)	-	(46 324)
1982	(46 700)	-	(46 700)	(19 147)	-	(19 147)
1983	(63 320)	-	(63 320)	(6 366)	1 767	(4 599)
1984	(62 880)	-	(62 880)	(3 740)	3 974	234
1985	(51 560)	7 032	(44 528)	(26 472)	6 183	(20 289)
1986	(45 640)	10 925	(34 715)	(24 073)	8 302	(15 771)
1987	(38 880)	17 704	(21 176)	(17 138)	10 421	(6 717)
1988	(16 900)	21 401	4 501	2 913	15 737	18 650
1989	(13 620)	25 293	11 673	2 946	21 065	24 011
1990	(6 670)	44 486	37 816	3 057	26 192	29 249
1991	(3 720)	63 510	59 790	2 855	31 405	34 260
1992	(665)	91 975	91 310	2 902	36 655	39 557
1993	-	115 037	115 037	(524)	43 295	42 771
1994	-	115 037	115 037	(441)	43 708	43 267
1995	-	115 037	115 037	-	44 070	44 070
1996-2010 (15 years)	-	115 037	115 037	-	44 070	44 070
EIRR = 14 percent			EIRR = 15.9 percent			

¹ Negative figures in brackets.

