IFAD Projects: Results and Impact on Poverty Reduction in Rural China

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6 Acknowledgements
1 Introduction
Introduction

•  China is the biggest developing country with the most number of poverty-stricken people in the world.

•  China’s absolute poverty had been decreased from 250 million in 1978 to 26.88 million in 2010 with the poverty incidence from 30.7% to 2.8%.

•  IFAD has made a remarkable contribution to China’s rural poverty reduction. During 1981 – 2006 (25 years), IFAD provided 488.51 million USD of long term favorable loans to 19 project areas in China, covering more than 130 counties (cities) of 24 provinces (cities).
-- In September 2006, on the occasion of starting a new round of cooperation between China and IFAD, a consultancy group was dispatched jointly by Chinese Ministry of Finance (MOF) and IFAD to undertake a comprehensive evaluation of IFAD project results and impact in rural China for the past 25 years.

-- Together with Prof. Li Zhou, Associate Prof. Sun Ruomei, both from the Chinese Academy of Social Sciences, I visited many IFAD project areas in Jilin, Anhui, Shaanxi and Qinghai provinces.
• In this research,

• -- We analyzed the economic, social and ecological benefits of IFAD projects in China during the past two-and-a-half decades, by conducting an investigation of field visits to the above 4 provinces and made a comprehensive assessment of 12 IFAD projects in 13 provinces in China.
• We conducted a systematic examination of IFAD project impact on China’s rural poverty reduction in five respects:
  -- food security; -- women and the vulnerable groups;
  -- government policies on poverty reduction;
  -- state policies on rural finance;
  -- institutional and capacity building of the Chinese government and the community.

• We came to important conclusions based on the findings of this research and proposed policy recommendations accordingly.
2 Data and Methodologies
Data & Methodologies

**Data:**

The data used in this research are taken from the official reports provided by IFAD as well as project management offices (PMOs) in relevant provinces or regions in China.
Methodologies:

The methodologies adopted:

- **Document review**: 12 IFAD projects in 13 provinces
- **Field investigations**: 4 provinces
- **Project stakeholder enquires**: over 150 people
- **Quantitative Analyses**: Regression models, paired sample T-test (using the SPSS software), comparison (before vs. after and with vs. without IFAD projects).
3 IFAD Project Benefits
3 IFAD Project Benefits

1. Economic Benefit
2. Social Benefit
3. Ecological Benefit
3.1 Economic Benefit

IFAD projects have made great economic achievements. From the economic results of 12 IFAD projects, 1,527,733 households with 6,334,761 population have benefited in the project areas, the farmers’ per capita net income has been raised from 794.88 yuan before project to 1,752.63 yuan after project, increasing by 120.49%. In Southwest Anhui Integrated Agricultural Development Project area, for instance, the farmers’ per capita net income has been increased from 521 yuan in 1995 (baseline) to 1,558 yuan in 2003, increasing by 199% (see Table 1).
Table 1. Changes of farmers’ net income for selected IFAD projects in China (comparison of before and after project).

<table>
<thead>
<tr>
<th></th>
<th>Number of households</th>
<th>Project area population</th>
<th>Net income before project (RMB)</th>
<th>Net income after project (RMB)</th>
<th>Value added (RMB)</th>
<th>Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1,527,733</td>
<td>6,334,761</td>
<td>794.88</td>
<td>1,752.63</td>
<td>957.75</td>
<td>120.49</td>
</tr>
<tr>
<td>1. Shaanxi 517_CN</td>
<td>244,730</td>
<td>938,920</td>
<td>765</td>
<td>1,375</td>
<td>610</td>
<td>79.7</td>
</tr>
<tr>
<td>2. Hubei 517_CN</td>
<td>181,460</td>
<td>723,936</td>
<td>777</td>
<td>1,042</td>
<td>265</td>
<td>34.1</td>
</tr>
<tr>
<td>3. Chongqing 424_CN</td>
<td>93,340</td>
<td>363,429</td>
<td>709</td>
<td>1,291</td>
<td>582</td>
<td>82.1</td>
</tr>
<tr>
<td>4. Haidong in Qinghai 424_CN</td>
<td>57,345</td>
<td>262,300</td>
<td>315</td>
<td>691</td>
<td>376</td>
<td>119.37</td>
</tr>
<tr>
<td>5. Hainan in Qinghai 364_CN</td>
<td>56,000</td>
<td>325,000</td>
<td>580</td>
<td>907</td>
<td>318</td>
<td>53.99</td>
</tr>
<tr>
<td>6. Southwest Anhui 451_CN</td>
<td>123,410</td>
<td>514,319</td>
<td>521</td>
<td>1,558</td>
<td>1,037</td>
<td>199</td>
</tr>
<tr>
<td>7. Beicheng in Jilin 300_CN</td>
<td>378,252</td>
<td>1,588,857</td>
<td>748</td>
<td>1,184</td>
<td>436</td>
<td>58.2</td>
</tr>
<tr>
<td>8. Shanxi 281_CN</td>
<td>111,200</td>
<td>448,000</td>
<td>290</td>
<td>1,800</td>
<td>1,510</td>
<td>520.69</td>
</tr>
<tr>
<td>9. Northern Pasture in Neimeng, Hei Longjiang, Hebei 62_CN</td>
<td>37,366</td>
<td>177,000</td>
<td>103</td>
<td>403</td>
<td>300</td>
<td>291.26</td>
</tr>
<tr>
<td>10. Hebei 107_CN</td>
<td>35,200</td>
<td>175,000</td>
<td>205</td>
<td>373</td>
<td>168</td>
<td>81.95</td>
</tr>
<tr>
<td>11. Guangdong 195_CN</td>
<td>32,930</td>
<td>130,000</td>
<td>999</td>
<td>2,335</td>
<td>1,336</td>
<td>133.73</td>
</tr>
<tr>
<td>12. Yantai in Shandong 254_CN</td>
<td>176,500</td>
<td>688,000</td>
<td>338</td>
<td>1,062</td>
<td>724</td>
<td>214.20</td>
</tr>
</tbody>
</table>

*Sources:* Based on data provided by the project completion reports and monitoring and evaluation reports of the relevant provinces.
To find out the statistical robustness of the farmers’ net income increases before and after the afore-mentioned 12 IFAD projects as against the total investment, we adopted a single variable linear regression model to test the relationship between the incremental income of farmers and the total project investment. The result indicates that:

IFAD total project input did have a significant effect on the increase in farmers’ net income in the project areas (Table 4: $\beta_1 = 0.624$, $t = 2.53$, $p = 0.030 < 0.05$).
Table 4. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-1E+007</td>
<td>1E+008</td>
<td></td>
<td>-0.087</td>
<td>0.933</td>
</tr>
<tr>
<td>Total project input (yuan)</td>
<td>1.491</td>
<td>0.589</td>
<td>0.624</td>
<td>2.530</td>
<td>0.030</td>
</tr>
</tbody>
</table>

Dependent Variable: increment of farmers’ net income in the project areas (yuan)
• **With vs. without project comparison:**

  of farmers’ net income between project areas and non-project areas of 5 projects in Jilin, Hebei, Guangdong, Shandong and Northern Pasture, we found that:

  (1) The increasing rate of per capita farmers’ net income in project areas (123.86%) is as high as 2.59 times of that in non-project areas (47.83%).

  (2) Per capita farmers’ net income in project areas increased by 76.03% (=123.86 – 47.83) due to IFAD projects regardless of non-project factors on economic growth and social progress in non-project areas (see Table 2).
Table 2. Comparison of farmers’ net income of selected IFAD projects in China (comparison of project and non-project areas).

<table>
<thead>
<tr>
<th>Region</th>
<th>Changes in farmers’ net income per capita in project areas</th>
<th>Changes in farmers’ net income per capita in non-project areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before project (RMB)</td>
<td>After project (RMB)</td>
</tr>
<tr>
<td>Total</td>
<td>299.13</td>
<td>669.63</td>
</tr>
<tr>
<td>1. Beicheng in Jilin 300_CN</td>
<td>748</td>
<td>1,184</td>
</tr>
<tr>
<td>2. Northern Pasture in Neimeng, Hei Longjiang, Hebei 62_CN</td>
<td>103</td>
<td>403</td>
</tr>
<tr>
<td>3. Hebei 107_CN</td>
<td>205</td>
<td>373</td>
</tr>
<tr>
<td>4. Guangdong 195_CN</td>
<td>999</td>
<td>2,335</td>
</tr>
<tr>
<td>5. Yantai in Shandong 254_CN</td>
<td>338</td>
<td>1,062</td>
</tr>
</tbody>
</table>

Source: Based on data provided by IFAD in China and IFAD project completion reports of provinces concerned.
To verify the soundness of the above-mentioned comparison, we did a paired sample T-test.

Table 5 shows a difference of \(155.868 - 81.790 = 74.084\) between \(T_1\)'s mean and \(T_2\)'s. This indicates that the average per capita net income in project areas is 74.084% higher than that in non-project areas. Table 7 is the hypothesis test of the two groups: \(H_0\): the means of \(T_1\) and \(T_2\) are the same; \(H_1\): the means of \(T_1\) and \(T_2\) are different. The test shows that the significance of \(T = \text{Sig. (2-tailed)} = 0.007 < 0.05\); therefore, \(H_0\) should be rejected. Thus, a significant difference exists between the net incomes in project areas and those of non-project areas. Verification is provided in Table 6. Because the correlation = 0.95 > 0 and \(\text{Sig.} = 0.013 < 0.05\), the two groups of data have a close relationship with each other and the coefficient is significant.
## Table 5. Paired Samples Statistics

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>T₁</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>155.868</td>
<td>5</td>
<td>96.471</td>
<td>43.143</td>
</tr>
<tr>
<td></td>
<td>T₂</td>
<td>81.790</td>
<td>5</td>
<td>78.360</td>
<td>35.043</td>
</tr>
</tbody>
</table>

## Table 6. Paired Samples Correlations

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>T₁ &amp; T₂</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T₁ &amp; T₂</td>
<td>5</td>
<td>.950</td>
<td>.013</td>
</tr>
</tbody>
</table>
From the above analysis, it can be concluded that the paired sample T-test on net income in both project areas and non-project areas is reasonable, which further supports our previous statement that the difference between farmers’ net incomes in project areas and those in non-project areas *is* significant.
3.2 Social Benefit

IFAD projects have achieved good social benefit:

(1) *The infrastructure has been greatly improved in the project areas.*

- **village roads:** Anhui 451CN built 68km new roads, renovated 252 existing roads, making every village accessible.

- **safe drinking water:** Haidong 424CN built 87.45 km of water diversion pipes and dug 188 wells to connect running water to the houses benefiting 6,638 people and 11,750 animals.

- **better living:** In the Northeast Sichuan/Chongqing project areas, 60% of project villages have installed telephones, 79% of project villages now have access to electricity compared with 42% before the project, and 36% of all households have TV sets.
(2) Employment opportunities have been greatly increased in the project areas.

-- With the development of rural enterprises, Nanpi county, part of the Hebei agricultural development project, offered jobs to 15,300 rural surplus laborers, 11,000 of whom were women.

-- Guangdong freshwater fish-farming project constructed 2,206 hectares of fish ponds, offering many jobs for the poor households in the project areas. There are 3,296 specialized households managing fish ponds, providing employment for 6,552 farmers.

-- The Hubei rural credit project has created 99,300 jobs, benefiting 287,000 farmers.
(3) The agro-technological extension system has been strengthened.

IFAD projects have reinforced the means and functionality of agricultural technical services and completed agrotechnical extension systems in the project areas.

Southwest Anhui 451CN Project built and renovated 35 agrotechnical and vet extension stations in the townships, and provided equipment for five county level centers. Through extensive training by agricultural technicians, every household has grasped one or two practical techniques, promoting the transfer of technological achievements into productive forces.
(4) The human capital of farmers has been enhanced.

IFAD projects have greatly improved the capacity for development of the farmers in the project areas. As more and more people have become prosperous through income-generating activities based on the rural industries initiated by IFAD projects, their awareness of development and prosperity has been strengthened, their enthusiasm for poverty alleviation and development has been inspired and their confidence to change the backwardness of the poor project areas has been reinforced.
3.3 Ecological Benefit

IFAD projects have increased the forest coverage in the project areas and improved the ecological environment.

Shanxi 281CN has increased the project area’s ability to counter natural calamities through land development. The project has turned 5,533 ha of upland into paddy fields and 13,800 ha of land into high-yielding fields through the improvement of 19,300 ha of low-yielding farmland; improved 12,600 ha of grassland to prevent soil erosion and effectively balance the development of livestock and pasture. The 5 counties have improved 3,133 ha of farmland and 2,267 ha of forested land through land improvement, which has effectively improved the ecological environment.
4 IFAD Project Impact on China’s Rural Poverty
4 IFAD Project Impact on China’s Rural Poverty

1. Household food security
2. Women & the vulnerable groups
3. China’s poverty alleviation policies
4. China’s rural financial policy
5. Institutional & capacity building
4.1 Household food security

IFAD projects brought great increases in grain output, resulting in self-reliance in food supplies and even some surpluses. M & E statistics of Shaanxi, Hubei, Chongqing, Qinghai, Anhui, Jilin and Shanxi Projects show that grain availability in the project areas has been increased from 235.94 kg per capita before the project to 388.81 kg after the project: i.e. an increase of 152.87 kg or 64.79%. During the 5-year project implementation, Haidong 424_CN grain production increased sharply, and the per capita grain availability rose from 140 to 270 kg, solving the farmers’ fundamental problem of feeding livestock (see Table 8).
Table 8. Changes of Average Grain Production in Project Areas

*(A Comparison of Before vs. After Project)*

<table>
<thead>
<tr>
<th></th>
<th>Food per capita before project (kg)</th>
<th>Food per capita after project (kg)</th>
<th>Amount added (kg)</th>
<th>Increase rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>235.94</td>
<td>388.81</td>
<td>152.87</td>
<td>64.79</td>
</tr>
<tr>
<td>1. Shaanxi project 517_CN</td>
<td>230.92</td>
<td>303.5</td>
<td>72.58</td>
<td>31.43</td>
</tr>
<tr>
<td>2. Hubei project 517_CN</td>
<td>278</td>
<td>353</td>
<td>75.00</td>
<td>26.98</td>
</tr>
<tr>
<td>3. Chongqin 424_CN</td>
<td>369</td>
<td>448</td>
<td>79.00</td>
<td>21.41</td>
</tr>
<tr>
<td>4. Haidong project 424_CN</td>
<td>140</td>
<td>270</td>
<td>130.00</td>
<td>92.86</td>
</tr>
<tr>
<td>5. Hainan project 364_CN</td>
<td>130</td>
<td>256</td>
<td>126.00</td>
<td>96.92</td>
</tr>
<tr>
<td>6. Southwest Anhui project 451_CN</td>
<td>135</td>
<td>281</td>
<td>146.00</td>
<td>108.15</td>
</tr>
<tr>
<td>7. Jilin project 300_CN</td>
<td>233</td>
<td>581</td>
<td>348.00</td>
<td>149.36</td>
</tr>
<tr>
<td>8. Shanxi project 281_CN</td>
<td>371.6</td>
<td>618</td>
<td>246.40</td>
<td>66.31</td>
</tr>
</tbody>
</table>

*Sources:* calculated based on data from project completion reports and M & E reports.
Similarly, the relationship between project input in all provinces and grain output in the project areas has been analyzed with a regression model by SPSS 13.0. Results show that:

Total input under the IFAD project had no significant influence on grain output increase (see Table 9: $\beta_1 = 0.386$, $t = 1.025$, $p = 0.345 > 0.05$).

This may be because the majority of IFAD loans (over 70%) are used to generate revenue from non-farm activities for poor households and less than 30% is used as seasonal credit for agriculture production. In other words, IFAD project investment has had far more impact on farmers’ income than on grain production.
4.2 Women and vulnerable groups

IFAD projects have paid special attention to poverty reduction and development of women and the vulnerable groups in the project areas. Through years of project implementation, IFAD projects have taken effect on:

• **(1). Changed the living and business conditions of women beneficiaries.**

• **(2). Improved women’s development ability.**
4.3 China’s poverty alleviation policies

(1) Introduced a mechanism for targeting, classification and escalation of poor populations.

(2) Given priority to monitoring and evaluation (M&E) of project efficiency and beneficiaries.

(3) Improved the flexibility of project readjustment.
4.4 China’s rural financial policy

(1) Cultivation of rural financial institutions by providing low-interest loans.

(2) Setting up mechanisms for rural financial institutions to participate in poverty reduction.
4.5 Institutional & capacity building

IFAD projects have exerted great influences on government organizations, project management offices (PMOs) and rural community-based organizations and greatly promoted the institutional and capacity building of these agencies.

(1) Strengthening the awareness of cooperation between government organizations.
(2) Increasing the management ability and efficiency of PMOs.
(3) Cultivating management personnel for international projects.
(4) Changing the philosophy of project officers.
(5) Promoting the growth of rural community-based organizations and strengthening farmers’ awareness of self-governance.
5 Conclusions & Policy Implications
5.1 Conclusions

(1) The results of IFAD projects in China are positive.

The analyses show that IFAD projects have achieved obvious economic, social and ecological benefits, improving farmers’ production and living conditions in projects areas with increased grain yield and income. Significant contributions have been made to solving the basic problems of poverty and hunger of the poverty stricken people, strengthening rural infrastructure and agro-technical services, and improving the ecological and community environment.
(2) The impact of IFAD projects on poverty reduction in rural China is far-reaching.

Direct impacts include the ideas of designing poverty alleviation projects to include scientific and beneficiary participation in decision making, targeting and paying sufficient attention to women and vulnerable groups. The mechanism of classifying and graduating poor households, capacity building, and providing tools for project management such as the M & E systems are also critical components. Indirect impact is often more influential, especially IFAD’s impact on China’s rural financial policies, poverty alleviation policies and the awareness of cooperation and coordination among government agencies.
(3) The role of international projects for poverty reduction in China is significant.

The participation in China’s poverty reduction from the international community, including IFAD, has played an important and irreplaceable role in China’s poverty alleviation process over the last two-and-a-half decades. (1) International projects play an obvious catalytic role in drawing attention and counterpart funding from the government and from all fields in society. (2) Advanced ideas of poverty alleviation and tools and methods of modern project management have been brought in, which will exert a far-reaching positive influence in the long term. (3) Valuable experience has been accumulated from trials on the models of poverty alleviation and micro-credit delivery to poor farmers, which will play a leading and demonstrative role in China’s poverty alleviation development in the years to come.
5.2 Policy Implications

(1) Pay attention to the role of international poverty reduction projects and continue to cooperate with IFAD.

Practices have proved that IFAD projects have brought about not only excellent results in the project areas, but also new ideology, new tools and methods for poverty reduction project design and management. The Chinese government should, therefore, seek further cooperation with international agencies such as IFAD and bilateral government or non-governmental organizations (NGOs) to make a greater contribution to poverty reduction in rural China in the new era.
(2) **Exploit the demonstration effects of IFAD projects.**

The far-reaching impact of IFAD projects in China in the fields of project design for food security, concern for women and vulnerable groups, the attention paid to capacity building, and the influences on China’s poverty reduction and rural financial policies have become a valuable experience for poverty reduction in rural China. The Chinese government should apply these ideas, tools and methods to other rural areas of China, to increase project management efficiency for Chinese poverty reduction projects.
(3) Facilitate the reform of the rural financial system in China.

The micro-credit model of IFAD projects has provided valuable references for China’s ongoing rural financial reform. The Chinese government should speed up the process of rural financial reform based on these experiences in an effort to stimulate the rural financial market and provide financial institutional lessons to guarantee poverty reduction in rural China.
6 Acknowledgements
Acknowledgements

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The end.
Thank you.
Comments are appreciated!
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