Livestock-In-Kind Credit
Helping the rural poor to invest and save

Investment in livestock has been prominent among the many tools used by rural people in the developing world to reduce risk and alleviate poverty. Investments in livestock are also used to hedge against rapid inflation, as well as against unexpected natural disasters such as droughts and floods.

This investment tool is commonly used in poor rural areas and vested in traditional hedging and safety net systems. The provision of livestock through inheritance or gifts has been a mainstay of most rural societies. As such, livestock owners use their animals either as a means of production (meat, milk, wool, eggs, etc.), as capital (storage of wealth), or both.

In the absence of rural banking, such dual-purpose use of livestock (production and wealth accumulation) increases rural security. Some development networks are helping the rural poor to obtain livestock to increase the financial security of their households and help enterprising rural poor emerge from poverty. This strategy also provides appropriate safeguards against overstocking and prevention and/or mitigation of environmental risks.

Credit and Livestock Improvement

The provision of livestock has been a common part of development projects since colonial times. The initial aim was to improve genetic stock. Such projects often emphasized large-scale cattle distribution to ‘modern’ production facilities, and required sophisticated inputs and veterinary care, and were often supported by public-sector funding. In most cases they were not sustainable and failed, especially when managed through the public sector. Moreover, they appeared to concentrate on herd expansion, rather than increasing efficiency. Occasionally, as a by-product of these delivery schemes, smallholders or smallholder groups were provided with male animals or heifers to improve local breeds.

Support for smallholder development only appeared on the agenda of development agencies in the late 1970s and 1980s. A new emphasis recognized the importance of women’s roles and animal traction, as well as the multi-purpose use of a variety of livestock species in an integrated smallholder farming system. Formal credit for livestock and related efficiency-improving inputs is often less accessible to smallholders than credit for crop production, even though livestock provide a significant source of income and food for 60 percent of the world’s poor. The reasons vary, but the focus on collateral in most credit institutions is one of the impediments which

Poverty reduction
The National Credit Fund for Women in India provides credit to poor women through voluntary organizations and self-help groups. Over one-third of the loans to 13,461 beneficiaries was for small-scale dairy development. This investment raises incomes, but the single-commodity project can have multiple beneficial effects, including improved nutrition, education (especially for girls), and job creation.

Investing in livestock can help the rural poor to invest and save, while at the same time reducing risk.
Livestock as capital

Investments in livestock provide:
- long-term security (mainly in predominantly livestock-producing systems) by solidifying social relations through exchange of stock and products;
- short-term seasonal security, where net benefits of the harvest are invested in livestock to be sold at the beginning of the following cropping cycle to finance the farm; and
- cash flow (through milk, wool, or meat sales) that helps pay for household expenses (school fees, taxes, healthcare, etc.).

is difficult for the poor and landless herders to overcome (Sansoucy, 1995).

Cash loans for livestock. Although the farmer’s flock or herd may be considered a savings tool, producers borrow to either expand their capital1 or improve production. Experience in the former Soviet Union and Albania demonstrates that in transition countries, with credit provided at real interest rates, a large part of the initial portfolio of rural credit institutions is loans to small-scale livestock owners. The rationale has not been studied in detail, but reasons for such a preference probably include cash flow and the reversibility of the investment. Eligibility for such loans must be determined by evaluating sound business plans.

In-kind provision of credit. In order to serve the poorest of the poor and landless farmers, who under prevailing banking standards are not eligible to receive loans, other methods have been explored. The provision of livestock-in-kind is an alternative means of credit.

In-kind schemes have traditionally been part of private wealth transfer in most parts of the world, either as (pre-) inheritance, assistance after calamities such as drought or epidemic disease, or informal risk-avoidance and/or insurance schemes. In many parts of the developing world this is still the case. Most of the donor-financed livestock-in-kind schemes in development projects are built on these traditions, and on the associated societal oversight of such schemes. As such, part of the fiduciary responsibility for loan repayment and other aspects is shifted to community control. Consequently these schemes are often named livestock-in-trust (LIT). In addition, some organizations use credit for livestock to smallholders as a tool for community development, improved food security, environmental improvement, and poverty alleviation. The livestock-in-kind systems can be summarized as described below.

Concept and objectives. The concept of LIT is based on the provision of live animals to poor farmers, who are then obliged to return a set number of offspring within a given time period. Generally this payback is in-kind, but in some cases it can be monetized. The overall objective of credit-in-kind systems is to help smallholders obtain access to means of production under conditions of market failure — either or both the formal credit systems and the market for goods needed by farmers. The former is most often due to lack of adequate formal institutions in the concerned communities. The latter is often associated with the lack of access to livestock by either new farmers, or farmers under new conditions.

Eligibility of the system. The decision whether or not to initiate an LIT scheme depends on the (dis) functioning of local markets, either financial or livestock. In addition, volatile financial markets may induce farmers to seek in-kind or barter arrangements rather than being subjected to vagaries in global and rural finance and interest rates.

Selection of implementing agency. The choice of implementing agency is crucial because there are opportunities for abuse and corruption. Major factors that contribute to the effectiveness of implementation are (Shumaker, 1998):
- The implementation agency must have skill and interest in livestock development and reducing poverty. Skills include animal husbandry and community development. Most common agencies include NGOs and public-sector livestock departments. Financial institutions have not been very effective, unless the institution has a proven ability to supervise village development. Implementation agencies may be requested to help a community develop a common vision and objectives. Project leaders need to be trained in participatory leadership.
- Mobility of the implementing staff to allow extension, guidance, and supervision is essential.
- Trust and good relationships supersede all technical aspects in ascertaining success. The group most likely to succeed (based on the experience of Heifer Project International) was women’s groups that had been in existence for at least three years. Groups whose main purpose is to apply for immediate assistance are the most challenging.
- The attitude of the implementing agency to decisionmaking and delegation of authority is important. Steady guidance and willingness to give authority to communities appears to be a guiding principle for the implementing agency, as are transparent details on various arrangements for eligibility, pay-back requirement, and penalties for defaulters.
- A robust communication and management information system and good communication, especially at the community level, are essential. HPI experience indicates the greatest success in communities with good and strictly

Credit-in-kind in Java

The Provincial Development Program of Central Java Province, Indonesia, introduced a new loan-in-kind project in the mid-1980s to replace the existing small ruminant credit system. Target farmers were divided into groups of ten, with each farmer receiving two female goats or sheep. The leader of each group received training in small ruminant management and a good quality buck or ram. Each recipient had to repay four 8-month-old lambs or kids over a period of 3 years. Evaluation in 1988 demonstrated that this project could be used to introduce new technology, increase farmer income, improve the production performance of existing goats and sheep, and improve group dynamics of farmer groups.
Table 1. Conditions for the selection of borrowers

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<tr>
<th>Precondition type</th>
<th>Description</th>
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<tr>
<td>Financial</td>
<td>Candidates should be informed about risks, rights, and responsibilities. They must sign a loan agreement with agency, community, or bank, and may have to take out insurance.</td>
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<tr>
<td>Environmental</td>
<td>Preconditions for receiving the 'loan' include at least:</td>
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<td>• Animal enclosure should be located and constructed in such a way that it will not lead to erosion and/or manure run-off in water systems (whether public waters such as groundwater, rivers, and lakes; or private wells).</td>
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<td>• Animal grazing should be controlled; for example, through fencing or housing.</td>
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<td>Social</td>
<td>Animal ownership needs to be accepted in the community. New owners should be informed and aware off responsibilities (keep animals confined, compensate neighbors for crop damage, keep animal healthy, etc.)</td>
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<td>Poverty</td>
<td>Candidates should not have similar or larger animals and a need should be demonstrated.</td>
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<td>Participation in groups</td>
<td>In-kind credit is in principle provided to a group (a community/village or within community/village). Candidates must be a member, and participate in various group activities. They agree to participate in continuing training sessions while holding the in-kind animal.</td>
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<tr>
<td>Technical</td>
<td>Candidates should be familiar with the technical aspects and risk of animal ownership, feeding, reproduction, animal care, etc.</td>
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<tr>
<td>Husbandry</td>
<td>Candidates should have been trained and/or familiar with housing, grazing, and overall management of their animal(s).</td>
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<td>Feed resources</td>
<td>Candidates must show proof that their farm produces sufficient fodder to maintain the animal (and future offspring).</td>
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<tr>
<td>Training</td>
<td>A sound and hands-on training program should be established and implemented well before the first animals are procured.</td>
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Enforced by-laws and a plan for leadership rotation (generally two years).

Eligibility and selection of recipients.
One of the major problems of most targeted credit schemes, whether cash or in-kind, is that they do not or only partially reach the target population. In various examples, more than half of credit earmarked for rural areas found its way into urban-based communities that did not really need it. The advantage of livestock credit-in-kind is its relatively low fungibility. The risk of reaching the wrong targets can be further reduced by careful selection of the recipient families (rather than single owners). This is mainly achieved through social control such as participation in groups before and during the in-kind provision, and intensive training and contact with the agency. These contacts are easier near urban centers; a factor which may explain why in-kind schemes near urban centers and markets are more successful than schemes in remote rural areas, where there may be a greater need.

Major eligibility criteria include need, and demonstration of interest, minimal technical ability, and acceptable good farming practices from both technical and environmental viewpoints (Table 1). Follow-up with the new owners is crucial.

Selection of investment. In-kind schemes may involve a variety of animals, including poultry, rabbits, bees, dairy goats, cattle, or water buffalo. In some cases schemes start with the provision of small stock, and with experience over time, increase the size of the 'loan/animal'. Animals provided by the scheme should be more productive than the average animals raised in the area. The project should also include a breeding strategy that will maintain or improve the animal quality. Selection should be transparent and require participation by an animal or veterinary expert to ascertain the overall quality, as well as the ultimate beneficiary or representative.

Protection of investment. Although the rural investor generally understands the general trend and risk of price movements, the major perceived risk is loss of the investment through disease or theft. This risk can be reduced by sound selection and inspection at purchase, and by the availability of technical support in animal husbandry and health. Such an effort requires either project- or public-sector-supported extension agencies and animal health services. Professionals in the public or private sectors can provide the latter, or where there are no vets, paravets can be trained and used. The project needs to allocate time and funding to the training of these technicians. Livestock insurance will largely accommodate the losses to the scheme or bank. The problems of fungibility and moral hazards, however, are rarely an issue due to the social control (and vested community interest) that characterizes LIT schemes.

Support systems. As indicated, group formation and group leadership are important forces in successful schemes. Other essential support services include technical advice to reduce waste and mortality, and improve fertility.

In some instances the concept of 'package loans' has been used (for example, providing a health package and feed for the first 3-6 months). Experience indicates that the beneficiary family is more likely to succeed if they put family labor and local resources in fodder production, and demonstrate commitment even before an animal has been received. The experience with insurance schemes is mixed, but some flexibility in the loan agreement that accounts for disasters such as drought and death may be judiciously applied. Support systems may be funded from revolving funds, for example, from the cash sale of male animals (in group dairy schemes), or initially, from project funds. However, decisions on how to pay for support services need to be built into the project design.

Transaction costs. The original donor or bank generally carries the start-up costs. Depending on the type of scheme, further
IFAD experience with revolving funds and cattle banks

The objective of most IFAD restocking projects was to establish a stock bank or revolving fund to assure sustainability of the investment. The fund is meant to be replenished (in-kind or cash) from credit repayments or from sale and distribution of drugs to the herding communities.

IFAD’s experience with revolving funds (in cash) has been disappointing. The reasons include inefficiency of the institutions in charge of the fund, exchange rate volatility, high interest rates, and lack of oversight capacity by the government.

Results from the cattle bank (in-kind) in Indonesia have been promising. An efficient monitoring and data recording system was transferred at the end of project implementation to mainstream line institutions, which has permitted fairly efficient cattle redistribution (from repayments) to other transmigrant farmers.

Sustainability of livestock-in-kind projects.

An analysis of the sustainability of several LIT schemes providing dairy heifers (Afifi-Affat, 1998) found that requiring repayment (over five years):

- with one heifer, the scheme is not sustainable;
- with two heifers, the scheme is sustainable at a project level, but less for participants; and
- with one heifer and one bull calf, the scheme was sustainable, if the value of the bull calf was equal or half the value of the heifer.

Insurance schemes reduced risk, but the premium may be too high to be attractive to farmer/participants. In theory, lending two heifers per participant would reduce risk (associated with disease or death), but may cause management problems.

Transaction costs can be carried by the beneficiary group, either by direct contributions, or by recycling the sale of male animals or services. In general, such transaction costs are lower than start-up costs of rural banks.

The end game. In-kind credit programs are a response to market failures and as such, are temporary. Possible end-points include when the market failure is resolved, or when the scheme has fully refunded the original loan to the state or lending organization.

Lack of cattle is often resolved by the scheme itself. Under conditions that support a reasonable reproductive rate, excess off-take should be available within five years. Lack of formal credit is more difficult to resolve, but ideally greater wealth of the beneficiary group may induce the establishment of formal or informal credit institutions.

Experience closing LIT schemes is fairly limited. Few schemes continue very long beyond the original project, but few had a detailed action plan to end the scheme. Whereas local repayments are often good due to sound social control (and often better than in the case of formal credit), repayment to national agencies may be hampered by the lack of trust that rural people have in such organizations.

Strict objectives must be set at the beginning of a project, as well as clear and transparent methods to end the scheme and distribute (or use) the assets. This requires indicators that allow measuring market failures as well as overall project performance. There is also a risk, especially with dairy cattle, that the number of animals and consequently milk supply may reach a level that can no longer be absorbed by the local community and market. The scheme should foresee this situation, and end distribution. Further assistance can be provided to expand the market through milk collection, and/or preservation through processing.

Readings


