

IRISH AID and ILRI

Better lives through livestock

Support from **Irish Aid** is enabling the [International Livestock Research Institute](#) (ILRI) and its partners to help millions of people in developing and emerging countries create ‘better lives through livestock’.

Some one billion people in developing countries still depend on farm animals—cattle; sheep, goats, camels, pigs, chickens, ducks, water buffalo and yaks—for their livelihoods. Opportunities for these small-scale livestock keepers have never been greater. Demand for meat, milk and eggs in developing countries is surging (far out-stripping that for cereals), driven by rapidly rising populations, incomes and urbanisation. Very poor people subsist almost entirely on cheap grains and tubers, with animal-source foods being largely unobtainable treats. As they become less poor, one of the first things people of all cultures regularly spend their newly disposable income on is meat, milk and eggs.

To meet this greatly increasing demand for animal-source foods in the developing world, increased focus has been directed at livestock farming over the past few decades in poor countries. But the developing-world’s livestock sector bears little resemblance to that in the West, where livestock production typically is conducted at large scale. In developing countries, most farms are small to tiny in size (often less than a hectare), are family owned and run with family labour, and are practicing what’s known as ‘mixed’ production, which integrates crop growing with animal raising. In addition, more than 40% of the developing world’s food producers are women.

The increased focus on livestock production in poor countries also means huge opportunities and challenges. Anticipating and helping developing countries and communities to respond to these opportunities and challenges is the daily work of ILRI’s 700 researchers and support staff and its much larger global network of partners. Together, these livestock experts are working to ensure that the on-going ‘livestock revolution’ benefits the world’s poor, both as consumers and as suppliers of nourishing animal-source foods, and does so with minimal harm to public and environmental health.

ILRI is one of 15 publicly funded international agricultural research centres that are members of a [CGIAR Consortium](#) working for a food-secure future. These centres and their many partners and research programs are working to reduce rural poverty, to increase food security, to improve human nutrition and health, and to manage natural resources in sustainable ways. The following examples illustrate a few of the ways livestock can serve as major (and readily available) instruments for meeting these diverse development goals.

Reducing rural poverty

ILRI’s research [on milk in Kenya](#) and [India](#) and on [pigs in Vietnam](#) has shown that small-scale producers can be highly efficient and competitive, producing safe products that meet local demand and tastes while creating and sustaining local jobs and businesses. Tailoring such research information for policymakers has enabled national and local governments to grow and improve their small-scale dairy and pork sub-sectors. In Kenya, pro-poor dairy policies are generating benefits valued at USD33 million a year, half of which directly benefit poor producers, many of them women.

Women of the developing world typically take on responsibility for much of the work of caring for livestock, of preparing livestock-food dishes for household consumption, and of generating daily household income through sales of livestock foods (e.g. milk and eggs) in local informal markets. ILRI is promoting ways to use livestock development explicitly to advance [women’s development and empowerment](#) (helping to close gender gaps), through, for example, [dairy enterprises](#).

Increasing food security

Livestock play crucial roles to enhance food security at local, national, regional and global levels. They do this directly, by providing nutrient-dense foods (often from low-value feeds that cannot be eaten by people), and indirectly, especially in poorer countries, by supporting crop-based agriculture through provision of manure to underpin soil health, and draught power to increase the amount of land that can be cultivated. They are also a readily accessible source of cash that can be used to purchase staple and other types of food and also farming inputs, such as quality seeds and fertiliser

To be productive in these ways, livestock have to be healthy and well fed. ILRI and partners are working to improve animal health in developing countries, where livestock diseases regularly exact large-to-devastating economic, livelihood and nutritional tolls on poor households. These scientists are [developing new livestock vaccines](#). Lessons learned from the recent global [eradication of rinderpest](#) are now being applied by ILRI and partners to achieve progressively better control of peste des petits ruminants (PPR), a killer of sheep and goats across large parts of Africa and Asia.

Scientists are also helping small-scale farmers better feed their animals. ILRI has worked with the Kenya Agricultural Research Institute to [safeguard supplies of Napier grass](#), an important fodder crop for Africa's small-scale dairy producers that was being attacked by a new fungal disease. The researchers identified and developed disease-resistant Napier varieties from ILRI's unrivalled African [forage genebank](#). The institute has also led work developing improved varieties of '[dual-purpose crops](#)', which produce both more grain for people and more and better quality straw for livestock.

Improving human nutrition and health

The addition of even small amounts of meat, milk or eggs to diets largely based on cheap staples (maize, rice, yams, sweet potatoes) greatly benefits human health by providing essential nutrients scarce or absent in grain- and tuber-based diets. On the other hand, consumption of too much or pathogen-contaminated animal-source foods can harm human health, and just living near livestock can be dangerous, with 60% of all human infectious diseases being derived from animals. ILRI recently made a strong [business case](#) for better controlling diseases passed from livestock to people, the annual cost of which it estimates to be in the order of USD85 billion. The institute also conducts projects that are helping to stop diseases in animals from becoming [human pandemics](#).

Managing natural resources sustainably

Cattle are major sources of the greenhouse gases warming the globe. Poorly fed cattle, such as those raised in the drylands of the Horn of Africa, produce particularly high amounts of methane and other climate-changing gases per unit of meat or milk produced. Another major source of greenhouse gases, as well as biodiversity losses, is the clearing of rainforests to grow soybean and other crops fed to livestock, especially pigs and poultry. ILRI is, with partners, developing '[smart feeding](#)' options – win-win solutions that improve livestock productivity while reducing their greenhouse gas emissions.

Regarding biodiversity, ILRI has helped introduce other win-win solutions in the form of incentives for East Africa's livestock herders to [conserve the wildlife](#) that share their pastoral lands and the recent mushrooming of community-based 'eco-conservancies', where wildlife and livestock, tourists and pastoralists, co-exist and find mutual support.

These examples highlight just a few projects from ILRI's portfolio. They illustrate some of the key [features of ILRI's work](#): developing and piloting new solutions, capacity building and influencing investors and decision makers, all based on sound evidence, high-quality science and effective partnerships that bring national and international researchers to work closely with development partners, investors, businesses, policy makers and local people to enable 'better lives through livestock'.

Irish Aid supports ILRI's work in two ways: it supports ILRI's core activities and directly funds specific ILRI projects, including [smallholder dairying in Tanzania](#) and small-scale [pig production in Uganda](#). In 2014, Irish Aid will invest Euro 1,195,000 directly in ILRI's work. An additional Euro 1,900,000 will be invested in major projects led by other CGIAR centres in which ILRI is a key partner.

For more information, please visit <https://www.irishaid.ie> and www.ilri.org