

The International Centre for Underutilised Crops



Championing underutilised plant species for food, nutrition and sustainable development



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ICUC provides expertise and acts as a knowledge hub for tropical, sub-tropical and temperate plant development.

Our Mission

To promote the use of underutilised crops for the benefit of humankind and the environment.

Our Goal

Reduced poverty and suffering through the improvement and promotion of underutilised crops for food, medicines, fodder and industrial needs, and for environmental protection.

Our Projects

ICUC provides expertise and acts as a knowledge hub for tropical, sub-tropical and temperate plant development. We work in close collaboration with national partners for sustainable technology development for products and marketing of underutilised crops.

Our partners

ICUC is active in over 30 countries. It works through partnerships with international, regional and national research and civil society organizations, NGOs and the private sector for the benefit of poor people. ICUC has been instrumental in the creation and coordination of several regional research networks on underutilised fruit and vegetable crops.

Our Future

ICUC builds on existing partnerships in underutilised plant species genetic resources research and will establish new links with public and private research and development partners. In particular, we want to strengthen our link with the private sector and focus on enterprise development and the development and marketing of novel products from underutilised species through community projects.

Through its mandate and its activities, ICUC directly addresses seven of the eight Millennium Development Goals and four of the five CGIAR Systems Priorities. We look forward to playing an active and stimulating role as a valuable partner in research for development.

We define underutilised crops as plant species that are used traditionally for their food, fibre, fodder, oil or medicinal properties. They have an under-exploited potential to contribute to food security, nutrition, health, income generation and environmental services.

At present, only 150 plant species are used and commercialised on a significant global scale; over 50% of the world's requirement for protein and calories are met by only three: rice, wheat and maize.

Yet, there are an estimated 7,000 species that play a crucial role in poor people's livelihood strategies and may have a significant potential for commercialisation.

Alongside their commercial potential, many of the underutilised plant species also provide important environmental services, as they are adapted to marginal soil and climate conditions.

ICUC and the CGIAR System Priorities 2005-2015



Through its mandate and experience, ICUC is contributing to the research priorities agreed by the International Agricultural Research Centres. In particular, priorities 1B, 2C, 3A and D and 5B will be targeted.

Priority 1B: Promoting conservation and characterisation of under-utilised plant genetic resources to increase the income of the poor

The conservation, characterisation, mapping and utilisation of genetic resources for the benefit of poor people is at the heart of ICUC's mandate. Hundreds of so-called "underutilised" species have been identified, and germplasm collections carried out in a number of partner countries. Following the establishment of national genebanks, agronomic and horticultural studies are carried out, followed by post-harvest and marketing studies. ICUC has become a recognised partner in Asia through its Underutilised Tropical Fruits for Asia Network (UTFANET) and its Asian spin-off, the Asian Centre for Underutilised Crops (ACUC), whose current members are Bangladesh, Nepal, Sri Lanka, Pakistan, the Philippines and Vietnam. Moving on, we now need to increase our understanding of potential species for industrial use, especially of underutilised oil and fibre plants, and to develop links with potential users of these products so that the poor people will benefit from new developments.

Priority 2C: Enhancing nutritional quality and safety

Through the characterisation of priority underutilised species, and the selection and propagation of superior germplasm, improved planting material is made available to the population. Working in tandem with national food standards agencies, ICUC is able to brand new products and open up new markets. By promoting crop diversity, ICUC is also contributing to providing nutritional safety in situations of climate change.

Priority 3A: Increasing income from fruit and vegetables

ICUC has carried out a number of marketing studies on hitherto underutilised species, notably fruit species in Asia. Training has been provided to entrepreneurs in processing of fruits, and in setting up and running small enterprises.

Priority 3D: Sustainable income generation from forests and trees

A large number of underutilised crops are either trees, or grow in forests: fruits and berries, mushrooms, rattans, medicinal herbs, roots and tubers. Our understanding of how local and cross-border markets for these products work is still sketchy, as is our understanding of sustainable harvesting methodologies, post harvest and processing methods.

Priority 5B: Making international and domestic markets work for the poor

Marketing and enterprise development is one of the priorities for ICUC's work in the next few years. By developing closer links with the private sector, organic and ethical companies, ICUC believes great benefits can be reaped by the poor. Functioning market information systems for a variety of products, and greater understanding of the national and international rules and standards are needed for the poor to enter these markets.

ICUC has been instrumental in the creation and coordination of several regional research networks on underutilised fruit and vegetable crops.



ICUC and the Millennium Development Goals

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The UN Millennium Development Goals provide important guidelines for underutilised crops research and development efforts in the short and medium term, in particular for combating hunger and malnutrition (MDG 1) as a necessary pre-condition for meeting any of the other MDGs. The list below gives only some examples of how we will address the challenge of the MDGs.

MDG 1: Eradicate extreme poverty and hunger

ICUC's work on underutilised fruits and vegetables makes an important contribution to this MDG. Underutilised crops are particularly valuable for the poor during hungry periods and as emergency food.

MDG 3: Promote gender equality and empower women

Underutilised crops have a large market potential, especially for women who can set up processing units in home industries, thus providing them with extra income and empowering them to decide on what to spend this money on. Training by ICUC and its partners helps participants to acquire the skills to adapt technology to their particular needs.

MDG 4: Reduce child mortality

Underutilised fruits, nuts, mushrooms and vegetables contribute significantly to the nutrition of poor families. In particular children, who often collect wild berries, mushrooms etc. from the wild, are provided with the necessary minerals and vitamins for healthy development.

MDG 5: Improve maternal health

Many of the underutilised species are particularly high in iron and calcium, necessary for healthy embryo development and the health of breastfeeding mothers.

MDG 6: Combat HIV/AIDS, malaria and other diseases

Over 75 percent of the rural population in Asia and Africa consults traditional healers or uses traditional medicinal plants when ill. Many underutilised plants have important medicinal properties and are readily available to the poor.

MDG 7: Ensure environmental sustainability

ICUC's programme to promote the genetic conservation and the use of underutilised species will ensure environmental sustainability as it is a strategy to diversify the agricultural landscape. This is particularly valuable where climate change has caused crop failure and changes in species suitability.

MDG 8: Develop a global partnership for development

ICUC's partnership approach has already helped develop several regional networks on underutilised fruits and vegetables. ICUC's stimulus for further cooperation amongst national and regional institutions, and amongst the public and the private sector will further enhance global partnerships.



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Interested to learn more about ICUC? - Please contact us:

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