



Policies, programmes and activities related to biodiversity for food and agriculture

Reports from international instruments and organizations

1. Contact information

Name and position of respondent

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Name of organization

CABI

E-mail of organization

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Geographical coverage of your organization

Global (48 member countries see <http://www.cabi.org/membership>)

2. Components of biodiversity for food and agriculture covered by your organization

Note: For a complete definition refer to Annex 1 of: <http://www.fao.org/nr/cgrfa/biodiversity/guidelines/en/>

Sectoral genetic resources for food and agriculture

Animal genetic resources

Aquatic genetic resources

Forest genetic resources

Plant genetic resources

Associated biodiversity of relevance to food and agriculture

Micro-organisms (including bacteria, viruses, protists and fungi)

Invertebrates (including insects, spiders, worms)

Vertebrates (including amphibians, reptiles and non-domesticated birds and mammals)

Wild and cultivated terrestrial and aquatic plants other than crop wild relatives

Please provide details on the components of biodiversity for food and agriculture involved (species, breeds, varieties):

PRIORITY AREA 1: ASSESSMENT AND MONITORING

1. Does your organization implement or support the implementation of projects or programmes that contribute to the assessment of the status of biodiversity for food and agriculture?

Yes

No

If yes, please provide details on the countries and species involved and indicate whether the population trends of these species are monitored:

CABI works mainly in Africa, Asia and South America with microorganisms and invertebrates; it also monitors invasive weeds; CABI produces plant pest and disease maps and therefore monitors population trends in these and invasive weeds storing an making available data through its knowledge bank <http://www.plantwise.org/what-is-the-knowledge-bank/>

2. Is your organization involved in surveying and monitoring population sizes of and/or threats to associated biodiversity species that are known to contribute to regulating or supporting ecosystem services in and around agricultural and food production systems?

Yes

No

If yes, please provide details on the countries and species and ecosystem services involved:

Plantwise is a global programme led by CABI, which works to help farmers lose less of what they grow to plant health problems. Working closely with national agricultural advisory services we establish and support sustainable networks of plant clinics, run by trained plant doctors, where farmers can find practical plant health advice. Currently Plantwise clinics are run in over 30 countries, and have reached more than half a million farmers since the programme began. Plantwise is a gateway to actionable plant health information and services – from pest diagnostic search tools to maps of pest locations and customized alerts on pest news. Today, there are more than 7,500 factsheets produced by top global institutions and Plantwise partners available on the knowledge bank, free of charge. Factsheets are short, practical guides which can be taken offline into the field to identify a plant pest on-the-spot and find a safe and effective solution. Factsheets include Pest Management Decision Guides, which describe safe options for fighting pests and reduce harmful risks of pesticides. Users can search for these resources by crop, pest, country or region – and even by climate zone – to find the answer to a plant health problem. CABI's invasive species programme is also developing rapidly with over 9,000 Data sheets and over 170,000 Abstracts, working on invasive species for over 100 years, and we develop workable approaches to tackle the biggest threats.

As well as supporting farmers and smallholders in managing their crop health issues, and promoting efficient farming methods, CABI scientists are world leaders in biocontrol research. We investigate a range of major invasive species problems around the world, the impacts they have and provide solutions. We also advise governments on invasive species policy, and produce books and tools for environmental managers, researchers and farmers on this global issue. Current projects include: brown marmorated stink bug is native to parts of East Asia and is invasive in the US, Canada and Switzerland; Plants from the Hedychium genus are widely loved and cultivated as ornamentals but a few are threatening delicate ecosystems in Hawaii, New Zealand, the Macaronesian Archipelago (Azores, Madeira and the Canaries), Brazil, Australia and La Réunion. We are researching natural ways to manage the plants where they have become invasive; control of Himalayan balsam and Japanese knotweed (*Fallopia japonica*) in the UK; managing invasive species threatening forest habitats in South East Asia; Woody

weeds and invasive plants in East Africa; rescuing and restoring the native flora threatened in Robinson Crusoe Island, part of the Juan Fernández Archipelago in Chile

3. Is your organization involved in surveying and monitoring population sizes of and/or threats to wild food species?

Yes

No

If yes, please provide details on the countries and species involved:

See invasive species programme and work on diagnosis of plant pest and diseases through Plantwise above

4. Has your organization identified major obstacles to assessing and monitoring components of biodiversity for food and agriculture that are part of its mandate?

Yes

No

If yes, please list these obstacles, being as specific as possible regarding the species involved:

Permissions to collect in some countries are difficult or expensive to secure

5. What are the priority measures that need to be taken to address these obstacles?

CABI's Access and Benefit Sharing Policy is being negotiated with its member countries in readiness for its endorsement in 2016

6. Please describe any additional activities relevant to the implementation of Priority area 1: Assessment and monitoring

PRIORITY AREA 2: CONSERVATION AND SUSTAINABLE USE

Conservation

1. Does your organization take or support actions to protect components of biodiversity for food and agriculture that are at risk from climate change, invasive alien species and natural or human-induced disasters?

Yes

No

If yes, please provide details on the countries and species involved, the actions taken, the impacts and the lessons learned:

CABI mainly works in its 48 member countries to help them protect and sustainably utilise their biodiversity specifically that related to Food and Agriculture. Specifically CABI's Invasive Species Programme, Plantwise, Knowledge programmes and publishing work in global agricultural development supports farming communities, aiding them as they battle with poor soil, invasive species, and pests and diseases, to improve their livelihoods. We also aid trade around the world and generate and provide information and knowledge. We work in our 48 member countries primarily <http://www.cabi.org/membership/member-countries/> Africa: Botswana; Burundi; d'Ivoire; Gambia; Ghana; Kenya; Malawi; Mauritius; Nigeria; Rwanda; South Africa; Sierra Leone; Tanzania; Uganda; Zambia; Zimbabwe; Asia: Australia; Bangladesh; Brunei Darussalam; China; India; DPR Korea; Malaysia; Myanmar; Papua New Guinea; Pakistan; Philippines; Vietnam; Solomon Islands; Sri Lanka; Americas: Anguilla; Barbados; Bahamas; Bermuda; British Virgin Islands; Guyana; Canada; Chile; Colombia; Grenada; Jamaica; Montserrat; St Helena; Trinidad & Tobago; Europe: Cyprus; Switzerland; The Netherlands; United Kingdom.

CABI works with country major crops and commodities but work consequentially impacts beneficially on a wide range of species. CABI has carried out several case studies to demonstrate impact and lessons learned covering several aspects of its work <http://www.cabi.org/projects/case-studies/>. some examples are: Soils in most sub-Saharan countries have inherent low fertility and don't receive adequate nutrient replenishment. The Africa Soil Health Consortium (ASHC) seeks to address this. This case study shows how we are helping to build capacity and develop exemplar development communication materials on integrated soil fertility management (ISFM). Smallholder farmers are often unable to access information or public advisory services on a regular basis, but mobile technology is providing an answer. With a growing number of the developing world's population now using mobiles (already up to 40%), CABI is enabling farmers to get timely and targeted agricultural advice. We are bridging the information gap that conventional public extension services cannot span. Despite significant progress, agriculture in Albania is still underdeveloped. This case study shows how CABI helped overcome problems in the sector. CABI implemented a project on Integrated Pest Management (IPM) followed by a three-year institutional partnership project. AIVs (African indigenous vegetables) have traditionally been a significant contributor to food security, nutrition and incomes for smallholder farmers in East Africa. However, lack of good quality seed has hampered farmers in meeting the growing demand. This case study shows how CABI tested three farmer-led seed production models in Kenya and Tanzania. We promoted access to good quality seeds and helped stakeholders develop the necessary skills to establish and manage seed production and marketing enterprises. Non-native invasive species, such as insect pests and weeds, have a huge impact on livelihoods, food production and biodiversity around the world. CABI tackles this issue by using classical biological control which provides a sustainable and cost-effective control method and minimizes the use of pesticides. In this case study, we outline three examples from programmes where CABI has played a role, and provide results from a further five studies. In Vanuatu, a decade of low world cocoa prices has led to many smallholder farmers neglecting their cocoa trees, resulting in infestation by black pod disease and rats, with catastrophic yield losses.

An Integrated Pest and Disease Management (IPDM) programme was initiated by CABI and CSIRO to demonstrate that increased yields could be achieved by using straightforward and practical control methods. Despite the economic importance of agriculture, many young people and women have little access to information that could help them improve their farming careers and livelihoods.

CABI have been working with women farmers in Pakistan, and now CABI have commissioned an impact study in order to learn lessons on the effectiveness of these training programmes.

CABI also houses a living collection of microorganisms holding some 30000 strains representing over 6000 species from 142 countries. This provides a agricultural sector based resource to study and utilise in developments in agriculture and biodiversity protection such as biocontrol agents and biopesticides.

2. Does your organization implement or support the implementation of conservation measures for associated biodiversity and/or wild food species?

In situ

Yes

No

Ex situ

Yes

No

If yes, please provide details on the countries, measures and species involved:

CABI houses a living collection of microorganisms holding some 30000 strains representing over 6000 species from 142 countries. CABI provides training and capacity building to help its member countries in particular conserve and utilise its biodiversity particularly in establishment of microbial domain biological resource centres (microbial culture collections)

3. If your organization maintains *ex situ* collections of biodiversity for food and agriculture components could you please provide further information on these collections?

As mentioned above CABI houses a collection of 30000 strains of microorganism (manly filamentous fungi) belonging to 6000 species. These are freeze dried and cryo-preserved for the long-term and made available for study and use both inside and outside CABI. We are a leading provider of microbial services. We specialise in microbial identification and verification, and provide professional microbiology services in support of industry, academia and agriculture. We have an enviable collection of living strains and provide a portfolio of training. The collection catalogue can be viewed at: <http://www.cabi.org/services/microbial-services/culture-collection/grc/>.

4. Has your organization identified major obstacles to enhancing the conservation of biodiversity for food and agriculture, and in particular of associated biodiversity and wild foods?

Yes

No

If yes, please provide details:

Funding to address conservation issues; poor links between in situ and ex situ programmes; assumption that microorganisms look after themselves in nature

5. What are the priority measures that need to be taken to address these obstacles?

Information generation; assimilation, analysis and use; CABI is working on its knowledge bank to connect different data sets to enable dynamic linking to get the most out of the big data that is out their. A better understanding of the data and information we have will enable a focus on priorities

Sustainable use

6. Does your organization promote management practices that support the maintenance and use of biodiversity for food and agriculture?

Note: For examples of such practices, please refer to Annexes 5 and 6 of <http://www.fao.org/nr/cgrfa/biodiversity/guidelines/en/>

Yes

No

If yes, please provide details on the countries and practices involved:

Integrated Pest Management (IPM); Integrated Plant Nutrient Management (IPNM); Sustainable soil management practices; Diversification; Restoration practices; Management of micro-organisms; implemented through CABI's Plantwise programmes as advice direct to framers and through specific projects. Examples of Projects: The Africa Soil Health Consortium (ASHC) brings together experts in soil health, and we bring communications expertise and experience of working with farmers. A key priority in Trinidad & Tobago is diversifying the economy and achieving food security. Agriculture can do this, and producing vegetables for local markets is essential. Plant pest and pathogen problems however are a huge constraint. Historically farmers have relied on chemical pesticides but these lead to a higher cost of food production, pollution and health hazards. Our aim was to understand the constraints to adopting Integrated Pest Management (IPM) and to use this information to develop an implementation strategy. Agriculture contributes over 20% of India's GDP. There are fears that the population will increase more quickly than farmers' ability to grow food. Helping them to grow more crops and lose less to pests and diseases means giving them access to practical information they can use to solve everyday farming problems. CABI is developing Direct2Farm – a service that turns fact sheets into short SMS and voice messages that are delivered straight to smallholder farmers via mobile phones. African Indigenous Vegetables (AIVs) are key to food security and income generation in Africa and are increasing in demand. Not only will CABI's project team be promoting their consumption and generating more demand, we will also be building awareness of the vegetable and the seeds, improving access to them and developing new varieties. Cocoa is a highly important export in Papua New Guinea, 80% of which comes from smallholders dependent on it for their livelihoods. But, production is threatened by the cocoa pod borer. Tricky to control, it is now one of the most serious threats to the global cocoa industry. We are developing effective ways to detect and predict infestations such as evaluating improved clones and then promoting better crop management, intensification and diversification, and region-specific extension. Microbes can be used to control insect pests and used in other biotechnology approaches. However, their use for the purpose of pest control is limited in Africa. CABI brought partners from Brazil, UK and Africa together, and experienced scientists and biotechnologists exchanged protocols, mechanisms and know-how on microbial diversity conservation and use. The aim was to accelerate development in Kenya and Ghana initially and which could then be adapted by other countries in Africa. As a staple food crop in South East Asia, it is a key driver of the countries' economies and essential to the diets and livelihoods of the billions of people who live here. We are involved in a five-year project that aims to measure the interdependence of ecosystem functions and services generated by long-term, intensive, irrigated rice fields here. Over 100 hundred projects are run globally for more information see: <http://www.cabi.org/projects/search/#>

7. Does your organization promote the application of ecosystem, landscape and/or seascape approaches?

Yes

No

If yes, please provide details on the countries and approaches involved:

Managing invasive species in selected forest ecosystems of South East Asia: Invasive species are threatening forest habitats in South East Asia. They also indirectly affect the livelihoods of millions of people who depend on forests for food, commodities and energy. CABI and the United Nations Environment Programme (UNEP), in collaboration with partners, have developed a project aimed at conserving globally important forests in the region. The initial aim is to enhance the capacity of Cambodia, Indonesia, Philippines and Vietnam to manage their invasive alien species. Global warning: A global network of nurseries as early warning system against alien tree pests

The international trade in live plants is a major pathway for the introduction of invasive tree pests and pathogens, resulting in

environmental and economic damage. Without knowing how harmful they could be, or that they even existed, they have not been regulated. A novel way of identifying potentially harmful organisms is to monitor trees in regions that export plants. The Action will establish a global network of scientists and regulators.

There were 23 projects in which CABI is involved on the projects data base that explore ecosystem approaches see: <http://www.cabi.org/projects/search/#>

8. Does your organization implement or support the implementation of projects or programmes on the use of biodiversity for food and agriculture to cope with climate change, invasive alien species, or natural or human-made disasters?

Yes

No

If yes, please provide details:

see: <http://www.cabi.org/projects/search/#>: There were 10 projects involving aspects of climate change for example: Coffee and climate change

Having faced decades of low market prices, coffee farmers are now contending with adverse growing conditions caused by climate change, leading to substantial crop losses in many places including Brazil, Vietnam, Tanzania and Central America. In response to the need for a comprehensive and systematic approach to this problem, the Initiative for Coffee and Climate is developing a toolbox and step-by-step guides for farmers on how to protect and improve their yields in the face of climate change.

There were 41 results on impact of invasive species including: Systematic review: The impact of invasive species on endangered species

Invasive species are likely to play a crucial and devastating role in driving native species to extinction. However, despite this assumption, the scientific evidence to support this notion has not been collected or examined systematically at a national or international level. We intend to carry out a systematic review which will collate all the evidence of how invasive species are impacting endangered species on the US Fish & Wildlife Service's list and provide a full answer to this.

Measuring the livelihood impacts of invasive alien species in East Africa

Although a lot is known about the biodiversity impacts of introduced species in East and southern Africa, very little is known about the livelihood impacts that they have on communities that depend on the goods and services provided by ecosystems. The aim of this project is to determine the negative socio-economic impacts of selected invasive alien plants on poor rural communities, especially farmers, in East and southern Africa.

Updating, maintaining and enhancing the Invasive Species Compendium

CABI's Invasive Species Compendium is an online, open access reference work that holds information on the presence, distribution and impacts of Invasive Alien Species (IAS). We are always looking for ways to improve it and keep the information up-to-date. This project is looking to improve the information on African, Caribbean and Pacific countries specifically and boosting the use of our Invasive Species Compendium here.

9. Does your organization implement or support the implementation of projects or programmes on the maintenance and use of traditional knowledge of associated biodiversity and wild foods?

Yes

No

If yes, please provide details:

10. Has your organization identified any major obstacles to improving the sustainable use of biodiversity for food and agriculture, and in particular of associated biodiversity and wild foods?

Yes

No

If yes, please list and describe them:

Crop losses to pest and diseases; rapid spread of invasive species; mitigation of climate change

11. What are the priority measures that need to be taken to address these obstacles?

Coordinated approaches; bringing together consortia to address specific priorities as opposed to competitive research programme calls

Access and benefit-sharing

12. Does your organization contribute to the development of mechanisms to improve access to and ensure the fair and equitable sharing of benefits arising from the utilization of biodiversity for food and agriculture?

Yes

No

If yes, please provide details on the countries, mechanisms and species involved:

CABI is working with its member countries to implement an Access and Benefit Policy that complies with regulatory demands, is transparent, implementable and reduces administrative burden. This draft policy is with its member country representatives who are negotiating its implementation with the National Focal Points. This policy will be presented at CABI's Review Conference for endorsement by its 48 member countries; it could serve as a global model system ensuring compliance and transparency. CABI works with its genetic resource community to develop best practices for the collection management and use of microbial resources.

13. Please describe any additional activities relevant to the implementation of Priority area 2: Conservation and sustainable use.

PRIORITY AREA 3: POLICIES, INSTITUTIONS AND CAPACITY

1. Does your organization support countries in developing, reviewing and adjusting their national policies affecting the conservation and sustainable use of biodiversity for food and agriculture, and in particular of associated biodiversity and wild foods?

Yes

No

If yes, please provide details and specify the countries involved:

Its 48 member countries listed above

2. Does your organization contribute to the development of regulatory frameworks or legislation for biodiversity for food and agriculture, and in particular for associated biodiversity, wild foods and ecosystem services?

Yes

No

If yes, please provide details and specify the countries or regions involved:

However, it participates in national stakeholder fora and offers its views.

3. Does your organization collaborate with other stakeholders involved in the management of biodiversity for food and agriculture (e.g. farmers, fisher folk, forest dwellers, the breeding industry, government agencies, research institutes and civil society organizations)?

Yes

No

If yes, please provide details:

CABI works with a wide range of stakeholders see: <http://www.cabi.org/about-cabi/who-we-work-with/>: We work for and with universities, national research and extension institutions, development agencies, the private sector, national and local governments, charities and foundations, farmers and non-governmental organizations. Donors

We are a not-for-profit organization. Only 3% of our revenue comes from core funding and we are able to deliver our scientific research through income derived from our project sponsors and our publishing activities. We therefore take care to use our funds extremely efficiently. We have a wide range of donors from international agencies, national governments, corporations and regional and local organizations. We are demand-driven and ensure that our project work delivers against our donors' needs and objectives.

Governments

CABI's Member Country governments influence CABI's mission and direction, and guide the activities undertaken. This unique, unbiased, inter-governmental structure allows us to bring together the views and interests of member government and recipient countries in a way that other science-based development organizations cannot.

Partners

We work in partnership with many organizations globally to achieve our mutual objectives and broaden our impact. Building partner capacity is an integral part of all our activities. Every CABI project is undertaken in partnership with other relevant local, national and regional partners to ensure that the solution to the issue we are looking at is robust, well communicated and sustainable. Click here for more information about our partners.

Farmers and extension workers

We improve the livelihoods of smallholder farmers through our work, helping them to grow more, lose less and improve their ability to sell produce at better prices. We equip extension workers with the knowledge and capability to give best practice advice to farmers and technicians throughout the food supply chain.

Researchers

Academic, international development and corporate research teams access the information they need to undertake their work via our specialist databases, compendia, books and published papers.

4. Does your organization implement or support the implementation of programmes to increase public awareness on the roles and values of associated biodiversity and ecosystem services in and around food and agriculture production systems?

Yes

No

If yes, please provide details:

As a publishing organisation we have book programmes, manage and disseminate data and participate in conferences and outreach events. CABI has a whole programme on Knowledge dissemination. We produce key scientific publications, including CAB Abstracts – the world-leading database covering agriculture and environment and Global Health - the definitive bibliographic database for public health information.

Behind each of our products is a team of subject specialists committed to delivering the most relevant and authoritative information to researchers worldwide. Our expertise includes agriculture, animal and veterinary sciences, environmental sciences, human health, food and nutrition, leisure and tourism, microbiology and parasitology, and plant sciences.

We also publish multimedia compendia, books, eBooks and full text electronic resources aiming to further science and its application to real life.

CABI believes that a crucial way to solve problems in agriculture and the environment is by creating, managing, curating and disseminating information. Through our experience in scientific research, publishing, knowledge management and communications we can put know-how into the hands of the people who need it most.

5. Does your organization implement or support the implementation of training or capacity-building programmes for the management of associated biodiversity and ecosystem services in and around food and agriculture production systems?

Yes

No

If yes, please provide details and specify countries involved:

This is a key area of CABI's work simply searching CABI's website shows 139 hits in this area and it has had a capacity building project in almost all of its 48 member countries. Specifically CABI has its extensive Plantwise Doctor training programmes and has trained over 2000 plant doctors. From CABI's history of expertise in Integrated Pest Management, we have built a training program which takes global plant health research from the laboratory to the fields. These training modules are step-by-step practical guides to becoming a plant doctor and running a plant clinic. In the process, they develop skills of professional extension officers to carry-out field diagnosis and farmer consultations. This training has been used primarily for plant doctors, but is also being piloted as part of agricultural education in university curriculums, such as the summer programme at Makerere University in Uganda. In addition to plant doctor training, Plantwise has designed modules which train other key stakeholders in research, education and regulation to manage the data which plant clinics generate, and monitor the quality of the plant clinic services. There are new modules being developed all of the time to meet the needs of the countries where we work, for example the new module on mass extension and plant health rallies.

It produces tools such as the Video: IPM knowledge and capacity building in Albania; Its various compendia and its knowledge bank. Examples of some of the activities are: RUFORUM: Building agricultural universities' capacity throughout Africa: Universities play an important and largely unfulfilled role in the well-being of small-scale farmers and the economic development of countries throughout sub-Saharan Africa. The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) supports universities to address this important role. Established in 2004, RUFORUM is a consortium of 46 African universities operating within 22 countries spanning the African continent.

Improving SPS training and knowledge sharing in cocoa: Cocoa is an important source of income across Southeast Asia. To maintain access to markets, and sustain farmers' livelihoods and national GDP, all food safety and international SPS (sanitary and phytosanitary) standards must be met. This project is building SPS capacity in the region, to ensure production and trade meets legislation on pesticide residues and other harmful substances. Best practices will be promoted throughout the value chain - from production to export - to improve quality.

Arming DPR Korea's farmers with tools to tackle soil pests: Food crops such as rice, maize and cabbage are grown over two-

thirds of Korea's total arable land. Damage inflicted by soil-borne insects threatens yields, with losses of up to 30%. The proliferation of these pests is the result of a lack of safe, feasible control methods. This project aims to improve pest management through making an effective, low-cost biological control agent – insect-killing nematodes (microscopic worms) – locally available.

Training facilitators and farmers in Pakistan: Farming in the Skardu valley is very important to the local economy. So, with funding from the Aga Khan Foundation, the CABI team are training facilitators and running Farmer Field Schools. Ultimately, we want to improve the food security and livelihoods of the area through increased productivity and profitability.

CABI also runs formal training courses in mycoinsecticide techniques; a four day training course provides expert tuition in the basic principles of plant health problem diagnosis, with a focus on diseases and techniques suitable for isolating and identifying causal organisms; Identifying environmental fungi.

6. Has your organization identified priorities for future capacity-building and education on associated biodiversity and ecosystem services in and around food and agriculture production systems?

Yes

No

If yes, please provide details:

Continuation of training of plant doctors; capacity building in invasive species monitoring and management; application of modern technologies and big data in solving agricultural problems

7. Please describe any additional activities relevant to the implementation of Priority area 3: Policies, institutions and capacity.

PRIORITY AREA 4: REGIONAL AND INTERNATIONAL COOPERATION

1. Has your organization contributed to the establishment or strengthening of regional and international research and/or education programmes to assist countries to better manage biodiversity for food and agriculture?

Yes

No

Please provide details:

This is a key priority area for CABI which is improving lives by solving problems in agriculture and the environment

CABI (Centre for Agriculture and Biosciences International) is an international not-for-profit organization that improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment.

Our approach involves putting information, skills and tools into people's hands. CABI's 48 member countries guide and influence our work which is delivered by scientific staff based in our [global network of centres](#).

CABI's mission is to improve people's lives worldwide by providing information and applying expertise to solve problems in agriculture and the environment.

We achieve our mission by:

- Creating, managing, curating and disseminating information
- Putting know-how in people's hands
- Improving food security through climate smart agriculture and good agricultural practices
- Helping farmers to trade more of what they sow
- Supporting farmers by increasing their capacity to grow better quality crops, and fight pests and diseases
- Bringing science from the lab to the field
- Protecting livelihoods and biodiversity from invasive species and other threats
- Combating threats to agriculture and the environment

We are committed to playing our part in helping the world reach [Sustainable Development Goals](#). Here we outline areas of focus where we believe we can make significant contributions to improving lives across the globe.

2. Has your organization contributed to the establishment or strengthening of regional and international programmes to assist countries to obtain training and technologies or develop information systems related to biodiversity for food and agriculture and related ecosystem services?

Yes

No

Please provide details:

CABI has been selected to host the secretariat for GODAN: Making agriculture and nutrition data open and searchable: Open data – data that is freely available and machine-readable for everyone to use – is a vital resource for improving global food security and human health. The Global Open Data for Agriculture and Nutrition (GODAN) programme has been set up to take pioneering agriculture and nutrition research information and make it openly accessible – together with up-to-date information on soils, weather, land ownership, market prices and similar – to the people who need it most.

Providing access to knowledge: Too often the results of important agricultural research fail to reach those people that could benefit; so despite advances made by researchers, transferring relevant and timely agricultural knowledge to farmers and the food supply chain, has tended to lag behind, despite the potential benefits. Getting the right information and knowledge when you need it, is a challenge. That's where we can help. We work to make scientific and agricultural information flow, giving users access to accurate, timely and relevant knowledge. This way thousands, or even millions, of farmers and extension workers in remote and rural areas benefit and are able to deal with the challenges of a changing climate, market trends or regulation. CABI's expert staff exploit the latest technologies allowing us to work globally and accessing hard to reach communities. We work closely with user groups to optimize reach and impact, and identify both their knowledge management needs and appropriate communication channels. And, because we are international, our in-country teams provide local insight and connections to science and policy-level decision makers. Capturing, repurposing and transferring knowledge: We systematically capture, repurpose and transfer knowledge to and from farmers, extension workers, researchers, policy makers and governments to help address food security and alleviate poverty. We exploit the latest technologies to make information quick and easy to access. Our information is quality assured, has a full metadata record, uses Dublin Core principles and a controlled vocabulary. We are leading on the open access agenda for our publicly funded research and were a founding supporter of the Coherence in Information for Agricultural Research for Development (CIARD) initiative. We also offer a number of Knowledge Management Services

Some of CABI's relevant projects: Direct2Farm: Agriculture contributes over 20% of India's GDP. There are fears that the population will increase more quickly than farmers' ability to grow food. Helping them to grow more crops and lose less to pests and diseases means giving them access to practical information they can use to solve everyday farming problems. CABI is

developing Direct2Farm – a service that turns factsheets into short SMS and voice messages that are delivered straight to smallholder farmers via mobile phones.

mFarmer: Providing Kenya's farmers with agricultural information via mobile: In Kenya, over 5 million smallholder farmers rely on around 5,500 agricultural extension workers so they are not getting the advice and information they need. New technologies to disseminate information are crucial to filling this gap. This project provides a unique and innovative service to provide phone-based agricultural information, advice and support to smallholder farmers. This service is utilizing Africa's mobile network and technologies to bridge the knowledge gap in rural areas.

Some of CABI's products: CAB Abstracts: "The most comprehensive database of its kind, CAB Abstracts gives researchers instant access to over 8.2 million records from 1973 onwards, with over 360,000 abstracts added each year. Its coverage of the applied life sciences includes agriculture, environment, veterinary sciences, applied economics, food science and nutrition." CAB Abstracts is the leading English-language bibliographic information service providing access to the world's applied life sciences literature.

Global Health: "Global Health gives researchers and students unparalleled access to all the world's relevant public health research and practice - providing knowledge without borders" Now with over 2.6 million records!

3. Please describe any additional activities relevant to the implementation of Priority area 4: Regional and international cooperation

CABI conducts regional consultations every 3 years; These triennial consultation meetings have become an important activity for CABI which is driven by the priorities of its 48 member countries, these meetings give CABI member countries an opportunity to influence the organization's agenda and for CABI to listen to and engage directly with them. This provides a unique avenue to understanding of regional priorities and helps identify the priorities to improve agriculture production and the livelihoods associated with it.

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