

Biovision

Newsletter March 2020

Curing people – conserving forests

In Uganda, traditional medicine is indispensable



A future for all, naturally

Fiona Nakakembo
Mbizzinya Village, Uganda



“The hospital is too far away and too expensive for me.”

“Betty is the better choice for me”

Around 600 babies have been born into Betty Semwogerere’s hands. How does the traditional healer handle her great responsibility?

By Peter Lüthi, Biovision

Betty Semwogerere knows from her own experience what it means to bring children into the world. “Actually, I had planned a hospital stay for giving birth”, says the traditional healer and midwife from Mbizzinya Village in the Mpigi district of Uganda. But she had been on foot when her labour started – earlier than expected. A car could not be organised, and transport by motorbike taxi was not an option. “I gave birth to twins – everything went well”, she says and smiles.

Cooperation between healers and hospitals

As a midwife Betty Semwogerere avoids twin home births. “I can never be sure if the babies’ position in the mother’s womb is correct and whether a problem-free delivery is possible”, she says. She only cares for first-time mothers if she knows them well. And she refers women with an increased risk of complications – about fifty per cent of her patients – to the clinic. But the traditional healer tells us that the clinic refers pregnant women to her, too. Before the births, she is in regular contact with Western medical doctors. When uncertainties or problems arise, she consults these specialists or takes her patients to the hospital.

Sound training as a traditional healer

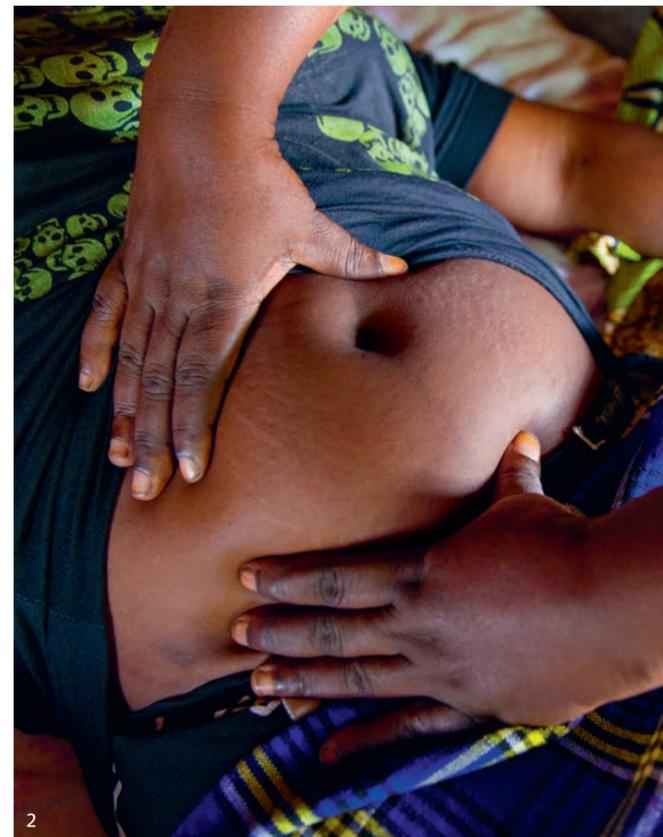
Semwogerere’s career as a midwife began early. At the age of 13 she was already helping her mother, who was also a traditional healer. Since then, she estimates that she

has accompanied around 600 births. In the meantime, Betty Semwogerere has completed several years of training as a traditional healer with PROMETRA Uganda. This non-profit organization is committed to preserving and further developing traditional medicine, culture and indigenous knowledge from Africa. The NGO runs a forest school for traditional healers in Buyijja on Lake Victoria (see also page 5). Biovision has supported it since 2012 to train over 1500 people, more than two thirds of whom are women.

Prevention and cure

Betty Semwogerere advises practically all the women in Mbizzinya Village – including Fiona Nakakembo, mother of four, who today has come with her youngest daughter Shifuah for a regular check-up. “It was Betty who clearly confirmed my pregnancy with Shifuah early”, she says. At first, the healer gave her a simple medicine made from only one plant. The better she got to know her new patient, the more she refined the mixture. “My medicine is not only for curing diseases, it also has a prophylactic effect”, explains Betty Semwogerere. And her patient emphasizes that the medicine woman was able to solve all her pregnancy problems. But why did she choose traditional medicine instead of Western medicine? “I wouldn’t have another option because the hospital is too far away and too expensive for me”, she says. And she adds: “Even so, I am convinced that Betty is the better choice for me.”

www.biovision.ch/traditional-knowledge



1 Since her youngest daughter Shifuah’s birth, Fiona Nakakembo has regularly taken her to the traditional healer for check-ups.

2 Betty Semwogerere cares for practically all pregnant women in the village and has already accompanied well over 500 births.

3 The healers in the Mpigi district of Uganda plant many medicinal plants in their home gardens, which they process themselves.

4 Healers make treatments as teas, infusions and ointments from the medicinal plants for patients.

Project “Forest School in Mpigi” (since 2012)

The project contributes to improving health care, organic agriculture and forest protection in rural Uganda.

- Goals of the current project phase:
 - education and training for traditional healers
 - conservation and use of native medicinal plants
 - dissemination of organic farming methods
 - organic farming training for 60 young people

• Project budget 2020: CHF 92,000

• Donation account: PC 87-1933093-4

• Sustainable development objectives (Agenda 2030):
This project directly contributes to 4 of the 17 sustainable development goals (SDGs):



Medicine from the forest

As in the rural Mpigi district of Uganda, over 80% of people depend on traditional healers.

PROMETRA Uganda supports these healers' responsibility in providing services.

We operate a training centre for traditional medicine in the Buyijja forest. We focus on good collaboration between traditional and modern health care personnel. Also of great importance to us is identifying and eliminating dubious or even harmful healing practices.

The training and further education courses are deliberately held in the forest school because the forest provides many medicinal plants. But the forests in Mpigi are facing enormous pressure that threatens to eradicate important native medicinal plants.

By creating gardens, the healers can obtain their medicinal plants and at the same time contribute to their conservation. As respected villagers, they are also important advocates of nature. Unfortunately, that alone will not be enough to preserve forests in Mpigi. Nevertheless, people's awareness of the value of the trees is crucial for securing the future of the forests.



Medical botany enjoys a very high status in the education and training of traditional healers. They know hundreds of different plants, how to process them into medicine and how the medicine should be used.

Opportunities and limitations of traditional healing practices

Careful training is essential for enabling traditional healers to correctly identify and use the right medicinal plants.

By Barbara Frei Haller, Biovision

In many regions of Africa, Asia, Central and South America, a local traditional healer or village midwife is the first resource for sick people. According to an estimate by the World Health Organization (WHO), about three quarters of the world's population first seek treatment from alternative medicine practitioners and their affordable herbal medicines in the immediate vicinity. Only when severe complications arise do many people travel the long distances to the city to see doctors trained in Western medicine who prescribe pharmaceuticals. The basic care of many countries is thus provided by a network of traditional healers who have refined and passed on their empirical knowledge of medically effective plant preparations over generations.

Not all herbal medicines are safe

If the wrong herbal medicine is used for a long period of time, for example, unapparent kidney or liver damage can lead to

complications. Local health authorities in industrialized countries are responsible for monitoring medicine quality and detecting harmful side effects. Active substances and plants are listed in official pharmacopoeias together with detailed descriptions and determining characteristics, as well as tests for quality control. The health authorities of poor countries, however, lack the capacity to monitor the many indigenous medicinal plants. The database of the Royal Botanical Gardens, Kew (UK) contains 28,187 plant species widely used in traditional medicine worldwide. However, only 4478 of these species are listed in authorized pharmacopoeias. Does that mean that the great wealth of knowledge of traditional medicine is not up-to-date? And what dangerous medicines are being used unwittingly?

Healing through nature

54 per cent of all newly approved therapeutics in the last forty years have been based on natural substances. Many of today's vital medicines for treating deadly diseases have been copied from preparations by traditional healers. For example, the Chinese Artemisia plant supplies the active ingredient artemisinin, and the bark of the South American Chinchona tree supplies quinine. These two substances form the basis of drugs that treat 214 million cases of malaria



PROMETRA Uganda established a traditional medicine school in the Buyijja forest. By doing so, it signalled its encouragement for preserving the valuable forests as a refuge for medicinal plants and against the progressive deforestation of the forest's chestnut trees.

annually. Even in treating diabetes, a disease that likely affects around 422 million adults worldwide, the design of the anti-diabetic metformin is based on the structure of a natural plant ingredient.

Medicinal plants and their habitats in distress

Globally, the demand for purely plant-based medicines is increasing. This demand is increasingly threatening many medicinal plant species. According to CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), 1280 medicinal plants have already been placed under protection. Supply bottlenecks lead to the collection of similar-looking plants, which in the worst case could be poisonous. Crucial for safely treating the sick are sustainable wild collection, the cultivation of medicinal plants and the clear identification of plant species.

Many of these aspects also apply at a small scale to the traditional healers of PROMETRA in Uganda (see pages 2 and 3). In their first year of training, students learn in detail about the medicinal effects and application of more than 100 plants. In this way, each learner compiles their own pharmacopoeia. The school has its own nurseries with medicinal plants and gives seedlings to the

healers for their gardens. This helps protect and preserve natural resources and increase the availability of medicinal plants.

Thorough training for traditional healers

After passing an examination, the second year of training focuses on correctly producing and administering drugs. Quality control is a top priority. Results from the second exam entail either repetition of the second year or promotion to the third year, which focuses primarily on case studies. This allows intensive information exchange about the efficacy and side effects of drugs. The limits of naturopathic practices are also clarified. The prospective traditional healers are repeatedly made aware of the point in time at which they must refer their patients to a doctor in the state healthcare system.

WHO supports strengthening traditional medicine

The World Health Organization (WHO) wants to strengthen the position and integration of traditional medicine in national health systems in order to "achieve the best possible level of health for all people" (WHO Constitution of 1946). The Nagoya Protocol (2010), an addition to the Convention on Biological Diversity, has increased legal security and transparency to enable fair and equitable sharing of the benefits from the use of genetic resources and traditional knowledge. A good instrument is available – but it should also be used.



Dr. Barbara Frei Haller
Biovision Foundation Board Member, Pharmacist and Lecturer in Ethnopharmacy at the ETH Zurich



Elizabeth Birungi
Programme director PROMETRA Uganda

Invitation to the spring event

Come to the Biovision spring event at Landhaus Solothurn! Take the opportunity to find out first-hand what Biovision is doing about the topic “Escaping from the Pesticide Trap”. At the event, you will hear about how sustainable solutions function in practice. The event will also offer the opportunity to meet our staff personally, exchange views and gain direct insight into Biovision’s work.

Tuesday, 26 May 2020, 7–8:15 pm,
Landhaus, Solothurn

Information and registration:
Tel. 044 512 58 58

www.biovision.ch/application



Refreshments provided at the spring event will offer the opportunity for direct exchange between guests and Biovision staff.

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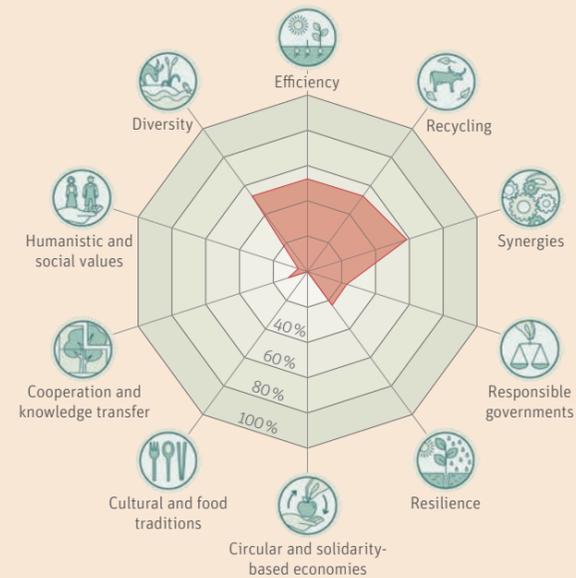
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States do too little

According to the FAO and Biovision, agricultural efforts of the UN member states are insufficient for solving the climate crisis. Proposals for transforming food systems focus one-sidedly on technical elements. Of major importance should be balanced measures in all ten elements of agroecology. Biovision is committed to sustainable and climate-friendly food production at every level.



■ Topics based on proposals for climate-healthy agriculture and the percentage that they are covered by all UN member states. Source: FAO/Biovision

Agroecology mitigates climate change impacts

A study by Biovision and the FAO clearly shows that agroecology increases the resilience of farms in East Africa – if it is applied holistically.

By Florian Blumer, Biovision

What development cooperation experience has long shown is now scientifically proven: agricultural ecology is an effective means for farmers to arm themselves against the consequences of climate change. This is demonstrated by a comprehensive study on agricultural ecology and climate change, which Biovision developed together with the UN Food and Agriculture Organisation (FAO).

The food system as a whole, from production to sale, is responsible for around one third of all greenhouse gases. At the same time, the agricultural sector is particularly threatened by climate change. Agroecology can contribute to solving both problems. The research also shows that the many aspects defined as necessary for climate resilience –

set as a goal by the signatories of the Climate Convention themselves – are almost identical to the various aspects of agroecology.

The international political level, however, is almost only considering exclusively technological aspects like composting, mixed cultivation or agroforestry. Neglected is the need to change market and political power structures. To make these changes, central elements of effective climate resilience would need to include establishing regional recycling economies, involving all actors in political decision-making processes and supporting participatory research.

A lot of influence is still needed to bring agroecology its breakthrough moment. Above all, we need to understand that a systemic approach is a prerequisite for effectively slowing down climate change and sustainably securing food production in the long term.

www.agroecology-pool.org/climatechangereport

New: Biovision in Geneva

The Biovision Foundation is strengthening its commitment in French-speaking Switzerland.

By Peter Lüthi, Biovision

Biovision is intensifying its relations with local and international partners in French-speaking Switzerland. This will strengthen our presence in French-speaking Switzerland to promote a change of course in agriculture and a more sustainable Switzerland.

Last November, Alessandra Roversi (Sustainable Consumption and Communication), Charlotte Pavageau (Policy Dialogue and Advocacy) and Sébastien Dutruel (Institutional Partnerships) moved into their offices at the Maison Internationale de l'Environnement (MIE) in Geneva.

Closer to local and international events

In addition to intensified cooperation with local and international partners, the team in French-speaking Switzerland will develop and implement projects to raise awareness of sustainable consumption – similar to the CLEVER project in German-speaking Switzerland. Our permanent presence in the UN city will also enable us to intensify our relations with international organizations and NGOs like the Geneva Environment Network (GEN), International Institute for Sustainable Development (IISD) and Sustainable Finance Geneva. New contacts will be made with people in academia, politics and business to promote the implementation of global sustainability goals.



The Biovision team Suisse Romande: Alessandra Roversi, Sébastien Dutruel and Charlotte Pavageau (from left)



Movement, communication and ingestion by animals like the millipede produce sounds that can be picked up by highly sensitive microphones.

The sound of biodiversity

Acoustic diversity correlates to species richness of the organisms in the soil. The pioneering acoustic exploration in the Swiss project “Sounding Soil” was published in the scientific journal “Soundscape”.

By Laura Angelstorf, Biovision

Marcus Maeder and his co-authors discuss the relationship between sounds and underground biodiversity plus the influence of noise pollution on soil ecosystems in their recent scientific article. A joint project of the Zurich University of the Arts (ZHdK), ETH Zurich, Swiss Federal Institute for Forest, Snow and Landscape research (WSL) and Agroscope, the study forms a basis for clarifying the effects of human activity on the soil as a living ecosystem.

The research work is revolutionary. While the influence of ship noise on aquatic ecosystems has received considerable scientific attention, sounds in the soil have been researched only very little or not at all. The project “Sounding Soil” changes this, directing attention to the ground as an indispensable resource for the cultivation of food and thus for food security.

“For most people, the ground is simply there, a self-evident fact not afforded any great importance. But healthy soils make an enormous contribution to functioning ecosystems”, emphasises Maeder.

Since 2017, he has been recording the many, often unfamiliar sounds in the soil. Together with the Biovision Foundation, he makes the sounds emitted by soil organisms audible in a “sound container” as part of the project. The location of the sound container is regularly changed to bring awareness of the importance of healthy soils to as many people as possible. Next, Maeder and his team plan to make recordings at selected locations over longer periods of time in order to better understand sound patterns related to specific times of day, seasons and locations.

Do you want to make recordings, too? Find further information and opportunities to participate at: www.biovision.ch/soundingsoil



Maya Graf, organic farmer, member of the Swiss Council of States and the Biovision Foundation Board “Only 10% organic: I find that shocking”

Biovision Foundation Board member and organic farmer Maya Graf from Sissach, Basel was elected to the Council of States upper chamber after 18 years in the national council. We asked the distinguished environmental politician what has changed in parliament – and what it will take to bring sustainability to our food system.

Interview: Florian Blumer, Biovision

Maya, how is the current mood in the federal parliament?

The autumn elections brought not only many more members of the green party into the national council, but also significantly more young people and women – this has changed the culture. Parliamentary service members have told me that this is the first time that we are seeing newly elected national councillors asking themselves where things stand and whether they are allowed to do this or that.

What are the young members doing differently?

They communicate more openly with each other, they have a looser understanding of

hierarchy. The young members have created a network – there is now a shared cross-party parliamentary apartment and an under-35 club. They don't just go out together – though they do that too – they also exchange ideas on topics that concern young people. There's never been anything like it.

And this benefits ecological causes?

Yes, because the transformation towards an ecological future is a cultural question: how we live, work, eat, cultivate, and interact with each other as a society.

What role do farmers play in the “green shift”?

Much in agriculture has changed for the better over the last 20 or 30 years. I grew up on a farm. When I was a child, there were no daisies in the meadows, not a single animal from any of the farms was ever outside. The farmers have done a lot. We have to show them that we recognize their efforts and support them.

How?

For example, with more suitable framework conditions. We need better declaration

regulations so that the production conditions for imported foodstuffs are clearly visible. Here the situation is miserable.

And the consumers?

There is a huge gap in consumption. In surveys, more than 50% of people say they want to buy more organic. But we have an organic consumption rate of less than 10%. I find that shocking. Then there is food waste: 40% of this is food that is thrown away at home.

So are we all at fault that our food system is not more sustainable?

No. People have been told for decades with regard to food: cheap is good. But I find it absolutely wretched to save money on food of all things. In the food sector we are dealing with a total market failure. For the market to function, all environmental impacts must be included in the product price of food, and employees must be paid fairly. A fattening chicken from Brazil or meat from EU fattening houses would then become unaffordable.

