Dear friends of Welthungerhilfe,

Armed conflicts and climate change continue to be the central driving forces of hunger. But inequalities between rich and poor, and the discrimination of women and girls make people go hungry as well. The unequal conditions present themselves in various forms on all levels of society. For example, in many countries it is common that – compared to male family members – women and children eat less and often less nutritious food. It turns out that whenever girls and women have little education and hardly any influence, babies and toddlers show the strongest signs of malnutrition.

Without access to education, it is less likely that people will accept nutritional advice on healthier diets and vitamin-rich food. On page four, you can read about how we work to counteract traditional food taboos in Myanmar, which can become life-threatening for mothers and their children. Our nutritional counselling plays a central role here.

In Zimbabwe, we enable peasant farmers to create their own nutritional basis in a diverse and sustainable way. We use very up-to-date methods for this project: the app “Kurima Mari” does not only offer farmers weather data and current market prices but also cultivation tips and the option to exchange information with others. On page six we present this approach to you.

We are pleased to be able to report these success stories. To a large extent, it is your support that has made our achievements possible. Thank you!

Yours sincerely,

Ute Latzke,
Welthungerhilfe Nutrition Expert
Hunger and malnutrition cause health problems and thwart development opportunities. All over the world, we support peasant families to free themselves from their plights.

**Zimbabwe / Gokwe**
Natural fertilisation methods plus nutritious fruit and vegetables ensure a varied and healthy diet. One example is the orange-fleshed sweet potato that children love as a snack. It is rich in beta carotene, a precursor of vitamin A.

**Bangladesh / Haor and Char region**
Sustainable approaches such as floating gardens make it possible for people to protect themselves against the consequences of climate change. Bamboo rafts support vegetable beds that survive even heavy floods.

**Madagascar / Tuléar**
We advise farming families on how to best grow their vegetables and provide them with high quality seed. Fast-growing fruit trees in nurseries enrich the food supply, providing vitamin-rich produce.

**Myanmar / Ayeryawaddi Delta**
Dietary taboos can be dangerous, especially for mothers and children. Consultations help to clarify what a balanced and nutritional diet consists of. Kitchen gardens and the use of nutrient-rich wild plants contribute towards diverse and healthy eating habits.

**Tajikistan / Baljuvon**
We support smallholder cooperatives to convert to more adequate and sustainable forms of agriculture. Later, these farms can serve as models to demonstrate how to ensure food security despite climatic changes.
Myanmar: Overcoming nutrition taboos

In Myanmar, more than a quarter of all children under the age of five are under- or malnourished. A more varied or balanced diet could improve this situation, but often, old superstitions let women avoid even nutritious foods during their pregnancy and nursing period. This means that also the children are not allowed to have these foods even though they are available. As one of our projects in Bogale in the Ayeryawaddi Delta shows, fighting the taboos takes convincing arguments and sensitivity regarding the local traditions.

In some cases, mothers will avoid only the plantains, in others, they will not eat any kind of banana at all. They fear that their foetus will grow so much that the baby’s birth will become very difficult. Ginger is also forbidden as it supposedly leads to miscarriages or disabilities of the child. And chillies supposedly cause the babies’ hair to grow only sparsely. The list of allegedly harmful foods is long and includes everything from fruits and vegetables to meat and fish – mostly highly nutritious food. The more rural or remote the area, the more strongly the taboos are engrained. People believe that the taboos have to be respected during pregnancy, breastfeeding and for small children. Ironically, the first 1,000 days, starting at conception until about the second birthday of a child, are exactly the crucial period during which a balanced diet rich in iron, calcium, vitamin A and folic acid is so important for the healthy development of a baby. The restrictions of the taboos quickly have devastating effects: the children grow up stunted and are denied the chance to fulfil their physical and mental potentials. They are often sick and have a higher risk of dying at a young age.

Understanding the causes and educating people

In order to effectively change nutritional habits, it is important to understand where they originally came from. Tin Nilar Win, nutritional expert and director of the LANN+ team (see p. 8) of Welthungerhilfe in Bogale says: “of course we respect religious traditions, but they hardly play a role in this case. Rather, surveys have revealed that misunderstandings and misinformation are at the root of the prejudices that have built up over decades.” Families pass on the information from generation to generation, and the nutritional traditions are handed down from generation to generation. Those who do not adhere to them feel the pressure from the village community.
Myanmar: Overcoming nutrition taboos

taboo become part of their eating habits that way. In the hierarchical families and village communities, the older generations make sure that the younger ones follow the rules and respect whatever is forbidden.

It is therefore quite a challenge to try and change these deeply rooted traditional eating habits in order to improve the health situation of women and children. Our project in Bogale shows one way it can work. Educational efforts take place on several levels at once. Tin Nilar Win explains: “In order to dissolve existing taboos, we ask for example, whether anyone actually knows of a case where something harmful happened after certain foods were consumed. If, for example, eggs are off-limits, we explain that children elsewhere eat eggs and develop especially well. We make sure to get everyone on board – the midwives, health workers, traditional healers and religious leaders. Especially the village elders need to be made aware about the issue, and we have to convince them to accept healthier nutrition practices. Otherwise it can happen that no one shows up in our cooking classes!” In these classes, Welthungerhilfe offers nutritional advice to the families, and the women can learn about how to put together vitamin- and nutrient-rich meals. “Whenever possible, we suggest alternative ingredients. You can replace bananas with pineapples for example” says Tin Nilar Win.

In March 2017, two independent experts evaluated the Bogale project. They confirm that the eating habits have indeed changed with the help of this multi-level approach, and that the influence of the taboos is shrinking.

Every 11 seconds somewhere in the world a child dies as a result of under- and malnourishment.

Little steps towards success

People are only slowly beginning to develop trust towards the advisors; social changes take time – and role models. “When the project started, one of our participants already had two children. During these first two pregnancies and also while breastfeeding, she had eaten such a very monotonous diet. This led to both of her first children suffering from malnutrition for such a long period, that they have not been able to catch up the delays in their development. Until this day, they suffer from weak immune systems and learning disabilities. She had her third child after participating in our counselling and completely changing her diet; and it’s her first truly healthy child!”, Tin Nilar Win tells us. She is happy every time a mother dares to try something new and finds herself rewarded with a well-nourished child. Because each of those women will encourage others to follow her example.

Whenever certain fruits are connected to a taboo, the nutritional advisors will suggest alternatives.
With their classic cultivation methods and traditional knowledge, Zimbabwean farmers are in no position to resist the fatal effects of the climate change. Increasingly often, massive rainfall or extended periods of drought destroy their crops. But new strategies can help: in order to improve the economic situation of families in rural areas, Welthungerhilfe for example implements innovative solutions and modern technologies.

Full of horror, Kudakwashe Mafuta, a farmer in the region of Shurugwi, remembers the growing season of 2015/2016: “In our village, we were waiting in vain for an agricultural advisor from the government to show up. Since I was not sure how severe the effects of El Niño would be, I planted the wrong crops, also for the cattle feed. All the farmers of the region experienced huge losses because of the extended drought.” Peasant farmers are the ones who suffer the most from Zimbabwe’s weak infrastructure. Despite fertile soils, they usually live below the poverty line. They hardly ever have access to new technologies, equipment or know-how. Communication is slow and cumbersome, the most reliable news arrive and spread by word of mouth via messengers who come into the villages. Normally, the agricultural advisors are the ones who are supposed to regularly update the farmers about such issues as animal epidemics, the general weather situation or which seed to use for the current climate situation. Since there are not enough advisors, however, and with each one of them covering about 1,200 households, important information often arrives very late or too late. Before they know it, families find themselves confronted with an existential crisis.

Keeping an eye on the weather and on prices
Kudakwashe Mafuta is now trying something new, turning his mobile phone into his most important tool: “during the last harvest festival, Welthungerhilfe visited our village and introduced ‘Kurima Mari’ to us, a mobile app for smartphones that was developed especially for farmers. A video showed us how multi-functional the app is. I was immediately persuaded and installed the app right away!” He is not only happy about the weather reports he now regularly receives as a text message, he can also get information from Kurima Mari about which varieties grow well in his region. Additionally, there are handbooks and videos that contain step by step explanations for cultivation methods and animal husbandry: “the news seem to forecast a good rain period. That helps me to decide which crops to plant and how to
fertilize them. I'm well-prepared for the coming season.” Expecting a bountiful harvest, he is planning to sell any surplus later on, with the app also assisting with that. He can find out about and compare current prices for agricultural products. Also available are tips on how to raise cattle, how to go about the financial planning and how to manage a business. Should any questions remain unanswered, he can also contact other users and exchange information with them. Or he can look up specialists in a directory and get in touch with them by calling them on the phone, via text messaging or a chat function. These can include the local wholesaler, the veterinarian, a government representative or a Welthungerhilfe employee.

**Customized information for each user**
Kurima Mari translates as something like “earning an income with agriculture,” and the peasant farmers urgently need a higher income. Welthungerhilfe employee Tawanda Hove, based in the capital Harare, continuously works toward this goal. Together with a team of web designers and programmers, the manager for information & communication technology analyses the feedback that the users send for example. That helps to improve the various functions of the app. “All contents come in several languages – Shona, Ndebele and English – and offer the farmers quick assistance so that they can help themselves. The app is not designed to replace agricultural consultants, but to support them in their work,” says Tawanda Hove. He adds: “Kurima Mari works offline and does not need a broadband connection, so it’s suitable for rural regions.”

About 22,000 peasant farmers, mostly in the Midlands region, already profit from the innovative technology. Since only a few of them actually own a smartphone, they organise in groups. Kudakwashe Mafuta likes sharing the information that the app provides with friends and neighbours. He is very hopeful regarding the future: “Kurima Mari opens up totally new horizons for us.”
Comprehensive food security with the LANN+ approach

**Nutrition, natural resources and wild foods**
LANN+ promotes the protection of soil, forests and rivers and the conservation of biodiversity to draw on as a basis for livelihoods. Nutrient-rich wild plants can enrich diets, and the sale of natural products generates an additional income, for example for food.

**Nutrition and agriculture – a perfect match?**
Staple foods are not enough to ensure an appropriate diet. Foods rich in vitamins and minerals are also necessary. LANN+ moves the focus towards more variety in people’s eating habits, which can for example be achieved by growing fruits and vegetables in kitchen gardens.

**The links between nutrition and WASH**
LANN+ raises awareness about how contaminated water, inadequate sanitation or insufficient hygiene cause diseases that contribute to malnutrition and prevent especially the children from developing healthily.

**Nutrition education, the central pillar of LANN+**
The aim of nutrition education is to promote a more diverse and nutritious diet for the entire family. However, the focus is on the more demanding nutritional needs of toddlers, pregnant women and breastfeeding mothers.

**Income generation**
LANN+ promotes various income generating activities in order to increase the purchasing power for food. Additionally, “wise spending” is promoted, which means that people should focus on buying healthy nutritious local foods instead of low-nutrient industrial products.

**Nutrition, income generation, markets and „wise spending“**
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**In order to overcome hunger and malnutrition, just raising the level of food production or increasing incomes alone will not be enough. People also need to gain knowledge about what healthy diets consist of, they need access to markets and good hygienic conditions. Existing natural resources must be protected and women must become involved in important decision-making processes. Using the LANN+ (Linking Agriculture and Natural Resource Management towards Nutrition Security) approach, Welthungerhilfe combines all the sectors that are crucial for a healthy diet in a training programme.**

The project approach focuses on the weakest families and supports them to improve their living conditions. The families learn how to change their behaviour and how to manage their natural resources more sustainably. They also learn how to ensure a balanced and healthy diet for themselves. Children, pregnant women and breastfeeding mothers receive special attention as they have particular nutritional needs and suffer from malnutrition the most.

Through role play, theatre and other participatory methods, families become able to identify the root causes of their poor nutritional status themselves and learn how to find locally adapted solutions. In cooking classes, they create new recipes together. LANN+, which Welthungerhilfe developed in cooperation with other organisations in 2009, combines agriculture, resource management, WASH (water, sanitation, hygiene), alternative sources of income and training on balanced nutrition. Being a holistic approach, the concept achieves impressive results in many project countries.

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