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## PROTEST

Iran is experiencing  
a widespread  
popular uprising

## GERMAN GOVERNMENT

Basic tenets of a  
feminist development  
policy

## MEDIA

Lies and truth  
in the age of  
the internet



# How to end hunger

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## FOCUS

### How to end hunger

Food security is currently deteriorating in many places. Covid-19 lockdowns, Russia's attack on Ukraine and financial speculation are causes. The climate crisis matters too, as extreme weather increasingly often wipes out harvests. Long standing issues, moreover, include that rural infrastructure is weak and smallholders mostly benefit neither from social protection nor generous farm subsidies. The second Sustainable Development Goal is to end world hunger. Though it seems to be slipping out of reach, it is still achievable, if policymakers take determined action. The focus must be on traditional smallholder communities, and international cooperation is indispensable.

**Title:** Orange-fleshed sweet potatoes are popular in East Africa.  
**Photo:** picture-alliance/photothek/Thomas Imo





 **Our focus section on food security starts on page 18. It pertains to the UN's second Sustainable Development Goal (SDG): end hunger. It has a bearing on the entire SDG agenda.**

are popular in cities, however, typically contain too much fat, sugar and salt, but too few vitamins and proteins.

By contrast, traditional farming communities typically have rather diverse and healthy diets. They eat a broad variety of vegetables, fruit, cereals, meat and fish. Due to population growth, their traditional practices often no longer suffice to feed all people in a village. Their productivity must be boosted in eco-friendly ways, and scientific researchers must help. Large-scale farming, on the other hand, must become eco-friendly. That does not mean to suddenly stop using fertilisers and pesticides, as was recently tried in Sri Lanka when the Rajapaksa government ran out of foreign exchange to import those goods. That experiment led to a harmful drop in productivity, but not to the needed ecological transformation.

Experts have been debating these things for many years. The current crisis is an opportunity to change course. If the international community musters the political will, SDG2 is achievable. The alternative is to let problems spin out of control.

## The top priority

Ending hunger is the UN's second Sustainable Development Goal (SDG). It is supposed to be achieved by 2030, but currently seems to be slipping out of reach. During Covid-19 lockdowns, food security deteriorated in many places. Russia's attack on Ukraine has compounded problems. Commodities trade on stock exchange is supposed to ease price volatility, but unexpected shocks can – and this time did – lead to spikes. The number of people who need humanitarian assistance is growing. Even in high-income nations, dependence on food banks is increasing.

So far, the international community has been producing enough food for everyone – but failed to distribute it appropriately. Too many poor people simply cannot afford to buy what they need, and inflation is causing additional pain. Moreover, supplies tend to be too short in strife-torn areas, such as Yemen, for example.

In the longer run, however, the world's farms may no longer produce enough even in theory. The reasons would be worsening environmental problems and the still growing world population. SDG2 thus deserves very much attention. The failing current food system must be reconsidered.

Though it may seem counterintuitive, policymakers have to focus on small-

holder peasants in the remote rural areas of disadvantaged world regions. Global food security hinges on them. The first reason is they are among the world's poorest and most food-insecure people. Most get no government support in terms of subsidies, infrastructure or social protection. For zero hunger to come true, their lot must improve.

The second reason is less commonly understood. It is that, in spite of their deprivations, these rural communities are custodians of indispensable resources. In the course of many centuries, their practices have shaped landscapes with resilient ecosystems, the collapse of which would trigger further environmental harm.

Local farmers have bred plant and animal varieties that are adapted to the local environment. Humankind must not lose these landraces. Commercial breeders use their plant-genetic resources to invigorate and improve high-yielding varieties. As biological evolution never stops, a cultivar must be cultivated to stay viable. It is not safe to rely only on gen and seed banks.

Industrial-scale agriculture is crowding out smallholders. It is destructively dominating land use.

It produces cheaper, but less diverse goods. The low-price processed goods that



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Development in Johannesburg in 2002. In this issue he spells out why traditional farming communities are of crucial global relevance (p. 30).

► All contributions to our focus section will also appear on our website [www.dandc.eu](http://www.dandc.eu), where you will find other related content as well.



Many Iranian women are fed up with headscarves.

WOMEN'S RIGHTS

## Determined youth stand up to autocratic regime

At this point in time, it is impossible to tell whether the protest movement in Iran will succeed. It has now been going on for several weeks in spite of oppressive security-force brutality.

By Shora Azarnoush

On 13<sup>th</sup> September 2022, a young woman collapsed in a police station in Tehran, Iran's capital. Four days later, her father performed a traditional Kurdish dance of mourning on her grave. While authorities

were swift to declare that Jina Mahsa Amini's death was caused by a pre-existing medical condition, rumours spread she had been beaten in police custody after being arrested for wearing her hijab loosely. People believe her death was caused by police brutality. A video showing women taking off and waving their headscarves at her funeral went viral. Protests erupted across the country.

Of Iran's 85 million people, half are under the age of 30. They have grown up with the internet and smartphones. Many of them are well educated. This generation

wants political freedom and economic opportunities, and is not interested in serving a religiously dogmatic government that does not share their ideals and values.

Young women in particular are fed up. They are tired of the strict dress code and want freedom in all spheres of life. Their situation is often absurd. More than half of Iran's university students are female, but while women do work in various professions as teachers, doctors or lawyers, they only very rarely reach positions of leadership.

### A HISTORY OF PROTESTS

Iran has seen major protests time and again. In 1979, a popular uprising toppled Shah Reza Pahlavi and ushered in the Islamic Republic. In 1999, students protested after a newspaper supported by the reformist then-president Mohammad Khatami was forced to close. The protests were smothered within a week.

Ten years later, protests erupted after a “landslide victory” was declared for the conservative establishment’s incumbent president Mahmoud Ahmadinejad in the 2009 election. In Tehran, more than a million people took to the streets. Protests spread to other large cities, and the message quickly changed from a call for fair elections to an end of the Islamic Republic. Indeed, the chant of the 1979 revolution, which brought the Shia Islamists to power, was heard again: “Death to the dictator”. Brutal repression by the regime’s security, however, ended the protests.

In late 2017, there was yet another protest movement. It was sparked by a deteriorating economy. Reform-oriented President Hassan Rouhani had to cut the budget of welfare programmes. Soon people were calling for an end of the political system. The security forces cracked down – as they did again in late 2019, when people took to the streets in opposition to a hefty increase in gasoline prices. The demand for fundamental change arose, but was violently silenced once again.

The young people fighting for their freedom now are determined to see the regime fall. They have learned from their parents that voting for reformist candidates will not bring them any closer to the lives they desire and deserve. It is true that past protests were suppressed with brutal violence under reformist as well as conservative

presidents. The reason is that the elected president holds a prominent and influential position, but the actual power centre lies with the unelected Rahbar (supreme leader) of the Islamic Republic. Ali Khamenei, holding this position since the death of the first Rahbar, Ruhollah Khomeini, in 1989, is the person in charge.

Khamenei effectively rules the country relying not only on the constitution, which makes him the commander in chief of the military and paramilitary organisations, but also benefitting from customary law and informal networks which make his grip on power very strong. People connected to him control – and profit from – the exploitation of Iran’s natural resources.

The young generation rose up against the regime when Amini – a person of their age – died in police custody. They have been joined by their parents. And their grandparents.

### PUZZLED WESTERN GOVERNMENTS

The situation leaves western governments puzzled. They hesitate to support the protests for fear of compromising their efforts to revive the Joint Comprehensive Plan of Action (JCPOA). The treaty puts Iran’s nuclear programme under tight limits and surveillance to prevent the country from acquiring nuclear weapons but ceased to be effective when Donald Trump, then US pres-

ident, announced his country’s withdrawal from the agreement in 2018 and reinstated sanctions that had been lifted as part of the treaty.

In Iran, citizens’ hopes for a better economic life after the implementation of the JCPOA were shattered when Iran’s economy continued to deteriorate despite the careful lifting of sanctions under the treaty. Their hope for a gradual improvement of their social and political freedom by electing reformist governments were deceived and finally inhibited altogether when the conservative establishment removed all reformist candidates from the 2021 presidential elections’ ballots. Protests are the last card in their hand and they are more determined than ever to play it.

At this point in time in mid-October, it is impossible to tell whether the protests will finally topple the regime or whether this will just have been another round of the cycle of protest, violent crackdown and graveyard peace. Protests have been going on for several weeks now and so far, the crackdown has had no visible impact on the intensity of the protests.

For an update on the latest developments as of the end of October, see box below on this page.

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## The latest developments

Despite growing brutality of security forces, people are still pouring into streets to protest seven weeks after Jina Mahsa Amini died in police custody. The traditional mourning period of 40 days is over, but dissent is still being expressed widely across the country.

That is remarkable, not least because Hossein Salami, the top commander of the Islamic Revolutionary Guard Corps (IRGC) stated on Saturday 29 October that this would

be “the last day of rioting”. The IRGC has a history of violence, but people were not deterred by Salami’s threat, as large numbers of protesters proved one day later.

Repression is murderous. Some 250 people were killed, according to estimates.

At the end of October, security forces attacked dormitories and a hospital of the Kurdistan University of Medical Sciences. They arrested many students. Observers spoke

of “an insult of the medical community”. A strike was announced, which shows that oppressive action is not working.

In Europe, however, Salami’s speech did make a difference. Germany’s Foreign Minister Annalena Baerbock announced that her country is tightening sanctions and is considering with the EU to classify the IRGC as a terrorist organisation. She added that negotiations on renewing the nuclear deal with Iran were currently on hold.

The Iranian diaspora, with support from civil-society groups in many countries, is

expressing solidarity with the uprising. Vigils and rallies have been held in many places. One demand is that the international community must do more to isolate the fundamentalist regime in Tehran. In Berlin, some 80,000 people rallied in solidarity with the Iranian uprising on 22 October.

Canada’s Prime Minister Justin Trudeau took part in a demonstration in Ottawa on 30 October. His government has announced it will ban the top leadership of Iran’s Islamic Revolutionary Guard Corps (IRGC) from travelling to Canada. SA



Iranian women demand self-determination.

#### WOMEN'S RIGHTS

## Intersectional approach

In late September, Germany's Federal Ministry for Economic Cooperation and Development (BMZ) hosted a conference in Berlin to discuss what feminism implies for development action. Minister Svenja Schulze elaborated her view.

By Hans Dembowski

Svenja Schulze took office last year. Early on, she declared that she was keen on a feminist development policy. Now she has begun to flesh out what that means.

In Berlin in September, Schulze emphasised equality. She pointed out that, wherever women bear equal responsibility, development results consistently turn out better than where women are denied equal rights. This applies to incomes as well as to indicators for health and education, for example.

Women all over the world, according to Schulze, want equality. The self-confident protests of Iranian women in recent weeks are proof of that applying to the Middle East and North Africa, a world region where women are often still denied their rights.

Schulze sees equality as a human-rights issue. Accordingly, a free and equal society must end all kinds of discrimination,

not only gender discrimination. Her approach is intersectional. As a Social Democrat, she says, she fights all kinds of inequality, and minorities must not be marginalised.

Women and girls, however, make up more than half of humankind, so they are not a minority. Nonetheless, they are often marginalised. In Schulze's eyes, awareness raising and targeted action are needed. Not only state agencies must rise to the challenge, but civil society and faith-based organisations are relevant too.

Schulze has directed her ministry to pay even more attention to gender issues than it has done in the past. By 2025, the share of projects that serve gender justice in developing countries in some way is set to rise from about 60% today to 85%, and 93% of all new projects will promote the cause.

The minister acknowledges that feminism has a long history. While much has been achieved, a lot remains to be done. She insists that feminism needs to be advanced with determination at all levels and that she is not willing to wait. From peacebuilding to climate justice, women's input in policy-making leads to better and more sustainable results, she argues.

Sexual and reproductive rights are crucial, in Schulze's eyes, because self-

determination begins with one's own body. Families' welfare depends on female empowerment. The minister wants women to be seen as agents of change and not merely as victims. Where girls are denied school opportunities, economies perform worse.

Schulze's agenda is not anti-men. She states clearly that men matter, not least because they are the rule-makers in many countries. The challenge she sees is to reach out to them and convince them. As young people are the future, the policymaker adds, it is important to give them a say. In her view, listening to one another is important, and euro-centrism is not an option.

Schulze intends to promote this comprehensive agenda in international cooperation and alliances. The Federal Government as a whole endorses this approach. Foreign Minister Annalena Baerbock has similarly made a commitment to feminist policy-making. As Schulze reports, even Chancellor Olaf Scholz has declared himself to be a feminist.

In Berlin, Spogmay Ahmed of the Washington-based International Center for Research on Women welcomed Germany's approach to feminist development cooperation. She emphasised that supported groups must be co-owners and co-leaders, not mere recipients.

Alvaro Bermejo of the International Planned Parenthood Federation (IPPF) endorses Schulze's call for action. Progress is not achieved in a long-lasting marathon, according to him, but in fast sprints. The experience of his home country, Spain, shows that change may seem impossible for a long time and then happens suddenly. Given that right-wing authoritarians are eager to move backwards on reproductive rights in many places, he says now is the time to "go, go, go".

According to Sima Bahous of UN Women, humanity is currently not on track to achieve gender equality by 2030 as spelled out in the UN's 5<sup>th</sup> Sustainable Development Goal (SDG). SDG5, however, is indispensable for achieving the entire agenda. In this context, she is grateful to Germany for being her agency's top regular donor.



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## EXPERIENCE OF RACISM

# “I do not define myself as a victim”

**Our author came from Turkey to Germany as a child. In her essay, she describes how bothered she was by the racism she encountered in her country of origin when she travelled there recently. She recalls leaving her homeland and arriving in a foreign country and describes her very personal take on identity, racism and exclusion.**

By Canan Topçu

It is actually a personal trip to Turkey, but my “professional deformation” does not allow me to switch off and simply be on vacation. Instead, I use every opportunity to chat with the locals. Regardless of whom I talk to, everyone complains, primarily about the cost of living, which increases daily. And sooner or later, almost everyone rails against Syrian refugees.

Supposedly they are receiving all kinds of financial support from the Turkish state, while needy Turks come away empty-handed. Many people in Turkey earnestly believe that the Syrian refugees are doing well financially. And in almost every conversation, I hear that they are “breeding like rabbits”. The high birth rate – allegedly six children per family – is all part of a strategy, people claim, and if this trend continues, in 20 years the majority of people in Turkey will be Syrian.

## UNCHECKED HOSTILITY

Thus the “replacement” conspiracy theory exists in Turkey too, and it circulates more or less unchallenged. To support his statements, one of the people I talked to sent me a video in which a well-known Turkish journalist presented “facts” on refugees. No matter if people are well-educated or day labourers who never finished school, unfiltered racism pours from their mouths. I am stunned by the unchecked and unchallenged hostility I hear articulated in Turkey.

It is pointless to try to discuss why Syrian refugees are being held responsible for all the country’s problems, because everyone I have talked to here seems to need them to be a scapegoat. In this way, they avoid confronting the true cause of Turkey’s

economic crisis: crony capitalism and the crumbling rule of law.

To be completely honest, I am very glad that I do not live in Turkey. And I am thankful to my mother, who, as a young woman and a mother of three, summoned the courage to come to Germany. Recruited by a chocolate factory, she made her way in 1972 to a country that she knew hardly anything about. She was not prepared to live and work in “Almanya”. And I was not prepared for her to go away.

I was seven years old, my sisters nine and twelve, when my father took my mother to the airport in Istanbul. My father followed my mother a few months later. My middle



Canan Topçu in 1972 in Turkey, shortly before her migration to Germany. She stands beside her class teacher on the school grounds in Gemlik, south of Istanbul.

sister and I went to live with our grandparents in the village, my oldest sister went to boarding school. One year later, our parents sent for us.

Even after 50 years, I cry when I talk about the time my parents went to Germany and left us behind. Migration is a trauma that has accompanied me my entire life. And yet I very much like living in Germany. Because here I was able to become the person I am now.

I had opportunities, could choose the profession I wanted and discover preferences and talents. All of that would have been more difficult in Turkey, also because of my parents' financial situation. Many people have supported me along the way, which is another reason why I feel like I belong to Germany. And this feeling is not something that someone else had to give me, and it cannot be taken away. I developed it on my own.

A lot of the current racism debate does not resonate with me. No, I do not feel excluded when I'm asked where I come from. If a colleague who I have spoken to many times on the phone does not immediately know who I am, I do not attribute it to my Turkish name. Thirty years ago or so, when I didn't get a traineeship right away, I did not suspect that racism was the reason and tried again somewhere else. Eventually it worked, in part because I had the support of some of the "old white men" who are so often maligned nowadays.

## MORE DIFFERENTIATION

Just so there are no misunderstandings: there is racism and discrimination against minorities in Germany. People are excluded based on their appearance, religion or other attributes. Unfortunately they also experience violence, which sometimes turns deadly. I live in Hanau, not far from the place where, on 19 February 2020, a right-wing extremist murdered nine people out of hatred for non-Germans. I experienced the aftermath of the massacre first-hand.

But there is too little differentiation, and racist motives are alleged more quickly than I think is sensible. For me, there is a difference between a dark-skinned person being spit on and kicked and a person being asked if they are taking a vacation in their "homeland" because someone has assumed, on the basis of their appearance, that they do not come from Germany.



I know how deeply painful it is to be excluded and to feel powerless. I remember very well what it was like when, in elementary school, I didn't speak enough German to explain to the teachers that I was curious and just wanted to look at something in a classmate's bag, not steal anything, like I was accused of. I also remember what it was like when a classmate called me an ethnic slur in class, and the teacher didn't do anything. But I also remember how I stood up, smacked the boy and sat back down.

I did not put up with discrimination. My mother taught me to defend myself. Things were not always easy for me, and that makes me even more pleased with what I have accomplished. For over 25 years I have worked to oppose exclusion and discrimination, which is another reason why it doesn't occur to me to define myself as a victim. If I did, I would just be belittling myself or reducing myself to my vulnerabilities. But that is exactly what some members of the post-migrant groups who set the terms of the racism debate are doing. If you believe them, Germany is racist through and through and built on structural racism. According to their logic, the "whites" are the perpetrators and the "blacks" – which sometimes refers to skin colour and sometimes is used politically as a synonym for minorities – are the victims.

Splitting the world into black and white does not correspond to my idea of humanity. No one is only a perpetrator or a victim, and people from minority groups are not necessarily disadvantaged or better than others. And not all "whites" are privileged. Those who insist otherwise are completely disregarding individual life stories and ignoring the fact that – to stick with anti-racism terminology – "white" people also feel that they have been left behind socially, culturally and economically, which they have been. Being warm-hearted and having a conscience have nothing to do with status and certainly not skin colour. Deny-

ing that supposedly privileged people have these qualities hampers the entire effort to create a more just society.

And everyone's goal ought to be for each of us to be able to live freely here and not be judged by our name, skin colour or background; for everyone to have equal opportunities and be treated fairly. Unfortunately we are still far from achieving that aim. But do you gain allies by offending people? I have seen in both my private and professional life that criticism and general accusations of racism lead some people to feel guilty and sympathetic, while others get defensive and turn a deaf ear. For that reason as well, I am for weighing the pros and cons and for dealing thoughtfully with one another. Missteps should be remedied with care. The fact that dark-skinned people or women in headscarves are featured on every advertising poster and in every company brochure is too obvious and trite for me.

Instead of going from one extreme to another, we should look for what connects us. According to neuroscience, experiencing cultural events together creates a sense of belonging and interpersonal connection. In my opinion, the identity marker "racist experience" is of limited use as social glue. But how can we help young people not define themselves by their experiences with discrimination?

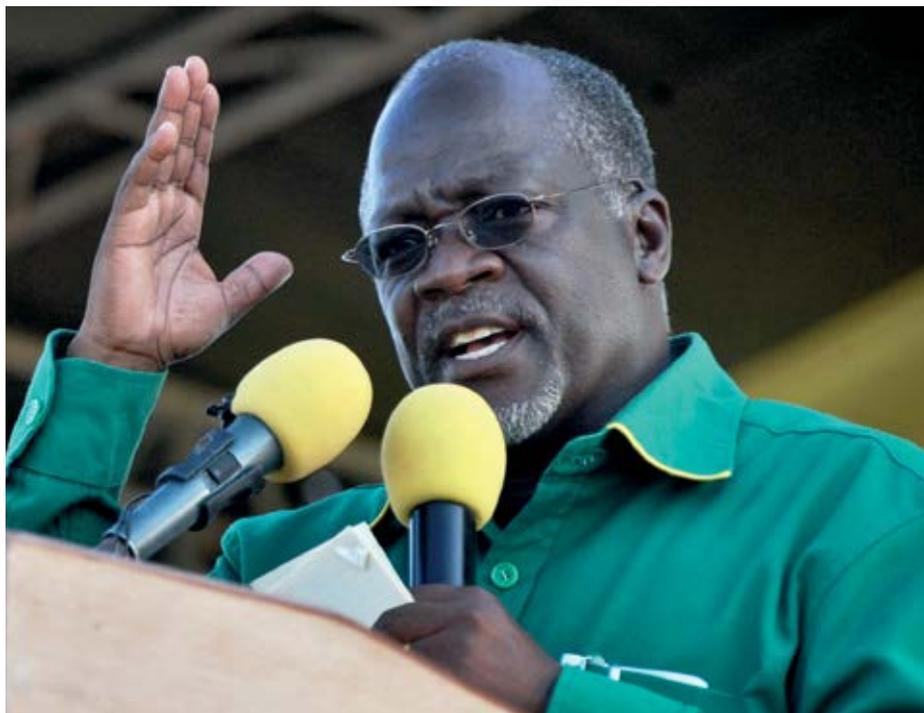
Schools can strengthen their sense of belonging. In order to achieve that, we need more and better trained teachers and social workers, and more time for discussion with young people and for creating and experiencing shared cultural events with them. Schools should not just impart knowledge, but teach social skills more than they have in the past. They should show how to solve conflicts and communicate without violence. Living in a more diverse society is something that has to be learned and practised.



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wir einander zuhören sollten, statt uns gegenseitig den Mund zu verbieten. Eine Ermutigung" (only in German – "Not my anti-racism: Why we should listen to each other instead of trying to silence each other. An encouragement") with Quadriga in 2021. [c.topcu@schreibenundsprechen.eu](mailto:c.topcu@schreibenundsprechen.eu)



Tanzania's now deceased former president John Magufuli severely restricted freedom of speech.

## DEMOCRACY

## Alternatives to fake news

**Fake news and disinformation are topics that have figured prominently in public debate in recent years. There is a great deal of talk about a post-factual age. In an interview with D+C/E+Z, political scientist Dannica Fleuß explains what it means, whether democracy is threatened and what strategies can help to counter it.**

**Dannica Fleuß interviewed by Maren van Treef**

**There have always been lies in politics and the public domain. Why is there now talk of a “post-factual age”?**

Two new aspects have emerged:

- In the case of post-factual statements, it is often unclear whether they are lies in the traditional sense. According to the philosophical definition, a lie is a statement that the speaker believes to be untrue and which he utters with the intention to deceive. In many cases, it would be more accurate to call post-factual claims “bullshit”, as de-

finied by US philosopher Harry G. Frankfurt. They are statements in which the speakers are not interested in the truth or falsity, but rather in the emotional response and affects created. They are generally statements that are so vague or loosely worded that they are neither true nor false. Bullshit is used to achieve strategic objectives. Populist forces using “bullshit” have a propensity for using anti-establishment rhetoric. They disparage democratic institutions, attack individuals and distort democratic discourse. Their objective is to rise to power themselves.

- Moreover, people seem to value authentic communication less in recent years. Inauthentic political communication such as bullshit and lying seems to be accepted by many more people than left-leaning liberal democratic intellectuals expected. Bullshit certainly also existed in the past but I assume that neither political actors nor the general public would have accepted it as a widespread form of communication in the public domain.

**Would there be a post-factual age without the internet and social media?**

Probably not as we know it today. I think the internet and social media promote the spread of certain forms of inauthentic communication, such as lies, fake news and conspiracy theories. There are two reasons for that:

- Social platforms are usually not edited. Hence, the veracity of statements is frequently not checked at all.
- Digital spaces sometimes give rise to echo chambers, where people exchange views only with people who hold similar views. The phenomenon certainly predates the digital age but the internet and social media make general public opinion- and will-formation across for example ideological divides much harder. Search engines and algorithms preselect the content that is presented to users and that aligns with their preconceptions.

In the past, such fake news would not have been picked up by reputable mass media and would not have been disseminated so widely.

**Why is trust in science and reputable media important?**

First of all, because democratic discourse requires a common basis of factual knowledge, even if facts very rarely permit only one valid or justifiable political decision. Science and reputable media help to form that basis for democratic decisions. But they can only do so if they are trusted. If people trust science and quality media and are well informed, there are fewer opportunities for political actors to gain influence through manipulation and disinformation.

**Is trust in science and reputable media decreasing?**

The data I have seen shows that, in Europe at least, traditional media enjoy more public trust than online platforms or social media. However, such results always depend very much on the questions which a survey asks. What empirical evidence clearly shows is a loss of public confidence in established political elites and institutions. But recent studies suggest that people's trust in fundamental principles of democracy is eroding too. That is even worse in my view. This indicates that people's trust in social elites is eroding across the board. And quality media and scientific elites may also be affected.

That scepticism towards elites probably existed before the digital and post-truth age. But I think digital media amplify it and make it more visible. Much of what used to be voiced at regular get-togethers is now posted on Facebook or Twitter and reaches a much greater audience. On social media, doubts are also expressed about scientific findings and reports by quality media. In the context of the coronavirus pandemic, I had the feeling that many people were very confused by the disagreement on Covid-19 in the scientific community. To regain trust, we need to make it clear that scientific results are always provisional and must be falsifiable.

**Why do people who obviously lie, like Donald Trump, enjoy popularity in some sections of the community?**

For people like Donald Trump, it is crucial to discredit established political, media and scientific elites in order to gain power themselves. In doing so, I think they touch a central nerve. The man on the street sees a yawning divide between the establishment and “ordinary people”. That perception is certainly justified in some ways. Whether the gulf between citizens and elites has widened or merely become more visible, and how wide it actually is, remains to be seen. But not respecting elites has struck a popular chord.

**Are democracies undermined by the abandonment of facts?**

Scientifically generated facts are the basis for certain discourses. However, I would hesitate to establish too close a link between truth or facts and democracy. On the one hand, we should not forget how political actors and social elites use terms like “truth”. Our empirical analysis of German newspaper articles has shown that the term “post-faktisch” (i.e. “post-truth”) is used almost exclusively by left-leaning liberal journalists and columnists in established media to discredit anti-establishment political actors and positions. I am in no way trying to legitimise Trump or other right-wing populist actors. But appeals to “the truth” have been – and still are – very often used to disparage the views of political opponents. However, political decisions are usually based not only on facts but also on political interests and values.

Post-factual communication certainly poses a threat to democracy if it undermines fundamental trust in democratic institu-



**Qanon conspiracy supporters.**

tions and officials and changes attitudes in favour of anti-democratic actors. But it can be counteracted if there is a free press and freedom of expression. Scientists and policymakers could also see post-factual communication as a challenge to explain scientific processes better and seek more public involvement in democratic processes.

**Who finances fake news propaganda?**

That very much depends on the context. Donald Trump had his Twitter account but also a financially strong lobby that very effectively disseminated his fake news and post-truth communication via traditional media. Particularly in non-democratic states, the sponsors are often regime elites, who support certain media outlets and sabotage others.

**You spent some time teaching and doing research in Tanzania and Kenya. How do you assess the situation regarding press freedom and freedom of speech there?**

I was in both countries during the Covid pandemic. In Tanzania, the official line under John P. J. Magufuli’s government was that there was no Covid-19. Anyone who contradicted that assertion faced reprisals or even imprisonment, depending on their nationality. Magufuli’s death – probably due to Covid – was officially explained as a case of heart failure. Under Magufuli, Tanzanians had very limited access to informa-

tion about the pandemic. Samia Hassan, Magufuli’s successor, did an about-face. She acknowledged Covid’s existence and set up a committee of experts. Masks are now worn and people can basically discuss the issue in public. In that respect at least, the situation in Tanzania has improved to a certain extent. In Kenya, press freedom and freedom of speech are largely respected and protected, but homosexual rights, for example, are not. People are free to express views on homosexuality but homosexual acts are technically punishable by up to nine years in prison. These examples illustrate the difference between democratic and non-democratic states. In Tanzania, people sometimes censored themselves out of fear. They also had virtually no access to independent sources of information. In the United States and other democracies, alternative media exist and alternative views can, at least in principle, be heard.



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Biodiversity at risk: Slash-and-burn construction in Ghana.

#### FINANCIAL SECTOR

## Environmental costs must become “internalised”

**In regard to the present biodiversity crisis, there is a lack of awareness, publicity and action. That is the conclusion of experts. The problems must be addressed in tandem with climate change. Valid financing models must be found.**

**By Maren van Treel**

The fast erosion of biodiversity on Earth is clearly evident in scientific findings. Experts find it alarming that this pressing issue gets so little attention from the media and the public in general. Matters are very serious. Johan Rockström of the Potsdam Institute for Climate Impact Research considers

the biodiversity crisis to be an even greater threat to humanity than the climate crisis.

In 2009, Rockström led an international group of researchers who investigated and developed the concept of planetary boundaries. They identified nine areas in which certain limits are crucial to the health – and indeed survival – of modern civilisation. The areas include climate change, freshwater use, ocean acidification and the losses of biodiversity that undermine biosphere integrity. If human interventions in these areas exceed what the planet can support, they will trigger devastating changes that threaten the stability of Earth’s ecosystem and thus the survival of the human race.

According to Rockström, human activity has breached those boundaries in six of the nine areas. Climate change and biodiversity are among them.

The implication is that we have left the Holocene climate epoch. For almost 12,000 years, that period was marked by stable environmental conditions which paved the way for today’s modern world. One of Rockström’s conclusions is that humanity must set sights on keeping the Earth system in a Holocene-like state. To achieve that goal, he says, biodiversity conservation and climate protection are necessary. They need to be achieved in a coherent agenda.

Unless nature is kept intact, Rockström warns, it will not be possible to keep global warming below the 1.5° target set in the Paris Agreement of 2015. He argues that a healthy biosphere will absorb carbon, even as humankind continues to emit it.

In many parts of the world, indigenous people are making a difference in this regard. Joan Carling is an activist from the Philippines and works for the international non-governmental organisation (NGO)

Indigenous Peoples Rights International (IPRI). She stresses that indigenous people perform valuable services in helping to maintain biodiversity, but are hit particularly hard by the impacts of climate change at the same time.

costs. The background is that environmental damages are often not covered in a business transaction, so people who are not involved in the transaction must bear the costs. Internalisation means that polluters pay for the environmental harm they cause. So far,

no easy answer, she says, but stresses that some things must be avoided. For example, she has advised against investment in projects that involve a change of land use. While not every pro-climate measure is good for biodiversity, she says, pro-biodiversity measures generally are good for the climate.

For some economists, the solution to make economic growth sustainable is a “green economy”, in which only low-carbon, climate- and eco-friendly industries operate. How to get there is a matter of debate. Christiane Laibach, a board member of KfW, is in favour of a two-pronged policy approach. First, more incentives must be created to make companies adopt sustainable business models. Second, she sees a need for stringent regulation.

Jochen Flasbarth, the state secretary at Germany’s Federal Ministry for Economic Cooperation and Development (BMZ) told the DFF that the transformation towards sustainability cannot be achieved only by government spending.

The private sector must play its part. In the financial industry, there are the so-called ESG criteria (the letters stand for “environmental, social and governance”) investors can apply to decide whether they wish to make a certain investment or not. The ESG criteria are controversial, however, because they lack a generally accepted definition.

Moreover, the various criteria in use only show to a limited extent how sustainable a company really is. Jennifer Paffen of Bethmann Bank AG/ABN AMRO argues that commitments to climate and biodiversity typically form only a small part of the “E” in ESG. So even if a company gets good ESG marks, it may actually do rather little or even nothing to protect the climate or biodiversity.

Environmental experts admit that they must do a better job of “translating” the topic of biodiversity for decisionmakers. Despite the topic’s complexity, they need to find ways to explain it in clear terms. They hope that this is how the necessary awareness to prompt people to action will be created.



Plastic pollution in the Indian Ocean.

Moreover, the IPRI opposes large-scale renewable-energy projects that hurt indigenous peoples’ rights to land and resources. That is the case when large dams are built for hydropower purposes or when large biofuel plantations are established. The IPRI insists that such projects must not be implemented without the prior and fully-informed consent of the indigenous communities concerned.

In October, experts from science, politics and businesses discussed climate and biodiversity matters at the Development Finance Forum (DFF), a KfW Development Bank event in Frankfurt, Germany. One of the main demands raised was for greater “internalisation” of “external” environmental

companies often make excessive profits because they shift the environmental burden on to indigenous communities.

Internalisation is easier said than done however. Biodiversity-damaging projects, for example, are harder to identify than climate-damaging ones. Broadly speaking, the more CO<sub>2</sub> or other greenhouse gases emitted by a project, the more damaging its impact on the climate. That is fairly easy to quantify. But as biologist Frauke Fischer of Würzburg University points out, the problem for biodiversity is that there is no simple equivalent to CO<sub>2</sub>.

She is often asked how a project’s biodiversity impact should be measured and how the costs could be calculated. There is



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## Fraudsters at work

Digital technologies such as mobile wallets via telecom networks are helping to promote financial inclusion in many developing countries. In Zambia, fraudsters are taking advantage of users and threatening the growth of digital payments.

Sitting unsettled in her business kiosk along Cairo road – one of the busiest highways in Lusaka, Zambia’s capital – 25-year-old Susan Chembo narrated through tears how she had been conned of her hard-earned money. “I’m requesting you to send your money via this number,” the message read, then provided a mobile number.

Coincidentally, Chembo had just told her uncle that she would send him money to help clear her goods at the border. She assumed the anonymous message was from her uncle who works as a clearing agent at Kazungula border in southern Zambia. So, she sent 5,000 kwacha (about \$285) to the number. Her uncle never received the money. Chembo reported the incident to the police, but the mobile number to which she sent the money was no longer in use. It was a fraud and the perpetrator could not be traced.

Mobile digital technologies and innovations such as mobile wallets are becoming popular in Zambia and helping to promote financial inclusion. Many Zambians, especially in low resource environments, now rely on their mobile-phone service providers to host virtual “bank” accounts that are easier to access than traditional banking systems.

With its population estimated at 18 million, Zambia’s two largest mobile operators, local units of Airtel and MTN, both supply mobile-money services. In April 2018, MTN announced a concerted effort to raise the number of agents in the country to expand usage of its platform while the state-owned Zamtel also supplies standard mobile-money services through its Kwacha brand and smart-phone mobile e-wallet app, Zampay.

The Bank of Zambia recently disclosed that mobile-money platforms had recorded increased usage with numbers growing to 8.6 million users by 31 December 2021 compared to around 4.85 million in 2019. Its statistics showed the number of mobile-money agents in Zambia stood at 47,000 by the end of 2018 compared with 23,000 in the previous year. The number of mobile-money accounts increased from 2.3 million at the end of 2017 to 4.3 million in 2018.

Mobile-money services are a major contributor to financial inclusion in Zambia. However, these platforms have lower security checks than traditional banking systems and have therefore become a target for criminals and fraudsters who take advantage of loopholes to con unsuspecting users.

Raymond Solochi who recently also lost K 500 (\$30) in a mobile-money scam explains how these fraudsters operate. He says, “these thieves are just using psychology, because they know that at one point or another someone might be sending money especially during pay days.”

If left unchecked, digital fraudsters have the capacity to cripple digital payment platforms. Policy makers in Zambia are therefore taking the issue seriously and devising means to check fraud over digital payment platforms.

Additionally, the Zambia Information and Communications Technology Authority (ZICTA) is on top of things and says it is alert and always sends messages warning people against posting their contact information on social-media networks and to keep their PIN numbers secret.



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Sustainable development requires global awareness and local action.

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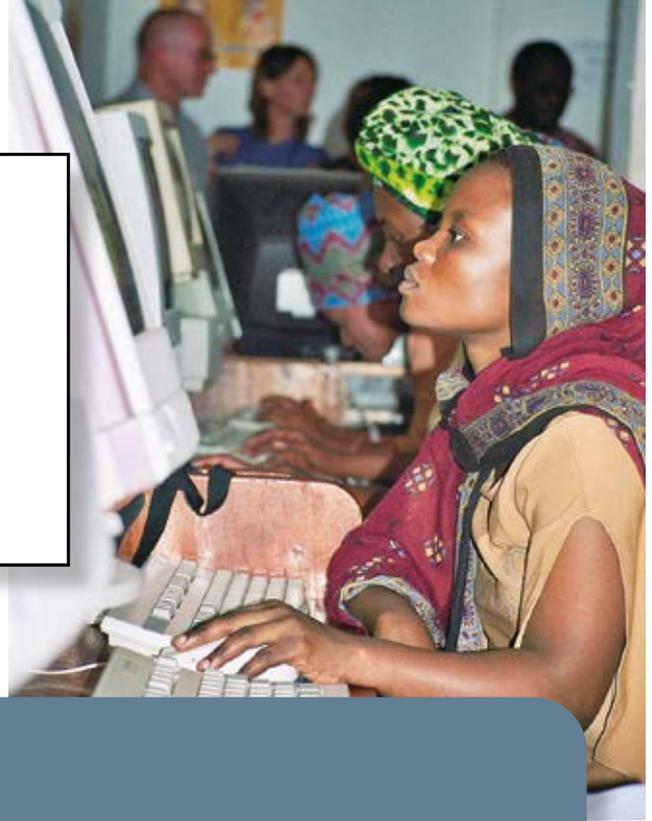
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## ECONOMIC MELTDOWN

# Give Afghans a chance

**The fate of Afghanistan's people deserves attention. They are suffering enormous hardship. The USA and its allies bear some responsibility.**

By Felix Kugele

A little more than a year has passed since the Taliban took Kabul in August 2021. The event made headlines and caused soul-searching among western policymakers, but quickly faded from public attention internationally.

Nonetheless, the USA and its allies still bear a large responsibility for the fate of Afghanistan's people. The USA is the dominant world power. It played a decisive role in bringing about the current crisis. Its engagement in Afghanistan long predates 2001, when US troops invaded the country after the Al-Qaeda attacks on New York and Washington. Afterwards, the attempt to build a democratic state was supported by NATO and the international community, but failed spectacularly. Many of Afghanistan's current woes originate in these two decades.

Now the Taliban are back in power. Afghans face momentous and almost entirely negative changes. Repression is harsh, though not as brutal as it was under the Taliban's previous rule. What matters more, however, is the economic meltdown triggered by western troops' infamous withdrawal last year.

Poverty is worsening fast. Some 24 million people need humanitarian aid, experts reckon. Unemployment has increased dramatically. Afghans of every social class have lost jobs and income. Even formerly prosperous people struggle to make ends meet.

The Taliban have never shown much interest in economic policymaking, but that is not what caused this crisis. The underlying problem is that after 2001, the economy had become entirely dependent on foreign funding, and that flow of money suddenly stopped. International partners had funded:

- Afghanistan's government agency, from national to local levels,

- the security forces,
- civil-society organisations and
- even some private-sector companies.

Moreover, international development agencies had invested in major projects. All summed up, the entire economy was driven by transfers from abroad.

Making matters worse, the influx of foreign money drove up the exchange rate of Afghanistan's currency, making export industries uncompetitive internationally. The big exception was the illegal drugs economy.

Without foreign funding, Afghanistan suddenly lacked the means to import goods of vital relevance, including food. Adding to the pain, the USA effectively began to sanction the Central Bank of Afghanistan, withholding \$9 billion which the Afghan state had kept in American bank accounts.

The Taliban's response to the broad-based suffering is inadequate. They have initiated some food-for-work programmes, but their government is basically begging for foreign assistance. Those appeals are largely falling on deaf ears because most governments shy away from engaging with them, fearing that such steps might be considered legitimising the new regime. International non-governmental organisations (INGOs) are staying away as well. The regime is isolated, not least due to US sanctions.

UN agencies are providing some emergency aid. A major famine has so far been averted. Afghans, however, need much more than a bare minimum of food. It is deeply disturbing that neither the UN, nor the USA and its allies have even a mid-term strategy for how to deal with Afghanistan.

Thanks to the failed western attempt at nation-building, Afghanistan's economy became dependent on foreign money. While there is no quick way out, to prevent a humanitarian disaster, some level of financial interaction with Afghanistan is necessary. Attempts to financially starve the new regime will most likely result in people actually starving. The goal should be to enable Afghans to rebuild a rudimentary economy, without officially recognising the Taliban regime.

Three sensible options are:

1. Free the \$9 billion, which are needed to maintain infrastructure.
2. Provide much more humanitarian assistance to Afghans directly.
3. Remove sanctions that prevent Afghan businesses and individuals to access international markets.

At the very least, INGOs must be free to operate in Afghanistan as they deem best. Even when they rely on funding from western governments, they should decide for themselves which approach looks most promising.



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People collecting food aid in Kabul in June 2020.

## FOSSIL ENERGY

# Longing for Trump

**OPEC+ decided in early October to cut oil production. That may hurt US President Joe Biden's Democratic party in the midterm elections.**

By Zohra Cosima Benamar

The purpose of the Organization of Petroleum Exporting Countries (OPEC) is to stabilise the oil market. Together, its 13 member countries account for about 40% of global oil production. They coordinate decisions with another 10 oil-exporting countries, including Russia. This informal setting is called OPEC+.

According to OPEC+, the production cut was a response to weakening global demand. Indeed, it makes sense to adjust supply in order to stabilise the oil price. On the geostrategic level, however, other things matter as well – including two wars in particular:

- Russia has been waging a military war against Ukraine since late February. This war is accompanied by an economic war with the west, in which energy is crucial. Russia has long been exporting oil and gas to European countries, and still continues to do so.
- Saudi Arabia is competing with Iran for regional supremacy. The two countries are engaged in a proxy war in Yemen.

Instead of isolating Russia, as Washington hoped, OPEC+ took a decision in favour of Moscow. The higher oil price implies that Russia will generate more export revenues. Moreover, it exacerbates supply problems in the EU. The high price may also have an impact on domestic US politics. Ahead of the midterm elections in early November, Republicans are blaming Joe Biden's policies for the high gasoline prices. Biden would be significantly weakened should his party lose its majority in one or even both houses of Congress.

Even though Saudi Arabia is a close ally of the US, it went along with other oil-exporters' wishes in regard to the production cap. In fact, the regimes in Moscow and Riyadh may share a longing for Biden's pre-

decessor, Donald Trump. His views on climate change, democracy and human rights were much closer to their own. Moreover, he denied climate change and did his best to undermine climate action at national and

OPEC member, to seek some rapprochement with the USA. That might seem even more likely, should the EU implement the embargo it has announced on Russian oil. That would entail that Russia and Iran would increasingly compete on the Chinese oil market, where demand is declining due to Covid-19 lockdowns. However, any détente with the USA is extremely difficult for Tehran – and most unlikely now, given that protests against its strict hijab rules are rocking the country (see Shora Azarnoush on p. 4).



President Joe Biden feels let down by Crown Prince Mohammed bin Salman after having visited him in Riyadh in July.

international levels. Oil-exporting countries know their time is running out and want to maximise profits as long as possible. They share this interest with fossil-fuel corporations in the US, which have generously supported Republican election campaigns for decades.

Trump, moreover, ignored the voices in the USA against arms sales to Saudi Arabia after the outbreak of the Yemen conflict. Riyadh equally appreciated his withdrawal from the Iran nuclear deal, which Biden wants to renew.

As Saudi Arabia is inching away from Washington, one might expect Iran, another

All in all, the OPEC+ decision was motivated by economic considerations. While Saudi Arabia did not fight for the US in this setting, it probably does not want to weaken its ties to Washington, while hoping that President Biden will be replaced by a Republican after the next presidential elections in two years.



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## How to end hunger

“If a social safety net for drought risks is in place, help can be provided swiftly.”

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“The above-average number of speculative transactions keeps the world-market wheat price high.”

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“Some of the world’s poorest people are the best custodians of genetic and other natural resources.”

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FIGHTING POVERTY

# Leave no one behind

**Social safety nets are key to fighting hunger and poverty in the global south. That is why Germany is supporting partner countries to establish and expand those nets, as Minister Svenja Schulze elaborates.**

By Svenja Schulze

Russia's war of aggression, Covid-19 and the climate crisis, too, with its extreme weather events like this year's fifth back-to-back summer of drought and the flood disaster last year, are having an impact on daily lives in Germany and are tangible reminders of the fragile nature of security. And here I mean not just security in its traditional dimensions of domestic and external security but also security in a broader sense. I am thinking of affordable food and of broad access to health care. Attainments that we all thought were solid, suddenly seem shaky. For many people, it is becoming more and more difficult to lead a self-determined life. The situation is made worse because these various crises are mutually exacerbating.

Germany may be feeling an impact, yet it is much worse for the often far more vulnerable societies in the global south. After years of progress, hunger rates have been increasing again since 2017. In 2021, up to 828 million people were suffering hunger; that is almost one in ten people worldwide. Roughly 30% of the global population – about 2.3 billion people – did not have reliable and safe access to adequate and sufficient food. At the same time, 53% of the global population – about 4 billion people – have no access to social protection. Each and every one of these people must rely either on themselves alone or on their social network, such as family, when faced with unemployment, maternity, disability or accidents at work. In Africa, as many as 80% of the people are without social safety nets.

There are good reasons to take a joint approach to food security and social protection in future:

- First of all, the more resilient a society is, the better it is equipped to meet cri-

ses – anywhere on the planet. Sufficient and high-quality food is essential for resilience. But social protection is also a way to enhance resilience in a crisis or even stop it happening. It enables people to lead a decent life even in times of hardship. And it also makes them more able to adapt and to respond to shocks, as in the case of extreme weather events, for instance, which lead to harvest losses or food price volatility.

- Second, it is rural areas with breeding and crop growing activities that hold the key to food security. In many countries



**Social protection is essential in times of need: Tunisian farmer exposed to drought.**

of the global south the agricultural sector provides the most important labour market and is the biggest employer and hence vitally important for many people. Promoting social protection in a sector that is as wide-ranging as agriculture helps society as a whole because it helps stabilise the overall social fabric and can serve as a model for other sectors. However, the challenges are especially pronounced in agriculture because people there are exposed to especially big risks. These risks are not only a threat to food security for the rural communities themselves, they often compromise food supplies for the rest of the population as well. Climate change can increase the risks even more. Here is an example: A woman loses her farm's entire harvest in a drought. The loss affects her as a subsistence farmer and her family. But it may also mean that she loses additional income she might have earned from selling her produce. She then lacks the money to buy seed for the next season. If a social safety net for drought risks is in place – ideally ranging from financing to payment mechanisms – help can be provided swiftly. And the next harvest is secured.

- Third, social protection promotes rural development. Many smallholders lack the financial means to take risks and invest in innovative production methods. Recipients of social-protection benefits can spend money on local goods and services, thus increasing demand. Every euro invested in social benefits generates up to 1.7 euros in additional economic activity.

- Finally, a basic idea of social protection is solidarity: leaving no one behind and targeting all of society. That is why social protection also facilitates social cohesion. It is often women who are responsible for feeding their families in addition to doing unpaid work in the fields or household chores and taking care of the children.

Women in our partner countries often work in the informal sector and hence do not benefit from (existing) social security schemes, which are almost always tied to formal employment. Going forward, we need to ensure that we design social-protection systems that take account of the daily realities and needs of women and girls. In this work, we also have to actively address social norms, gender stereotypes and discriminatory power structures in society. That way the introduction of social protection schemes can also have a gender-trans-

formative effect. This is urgently needed to achieve more gender equality in the sense of comprehensive social equality – for which I am working through our development cooperation.

### GLOBAL SHIELD

Delivering greater equality in the spirit of a global just transition is also our motivation behind our efforts to set up a Global Shield against Climate Risks which the Federal Ministry for Economic Cooperation and Development (BMZ) is advancing. Social protection has a key role to play here, complementing climate risk finance and private insurance solutions. The Shield can help particularly vulnerable people – including many women – for instance in the case of droughts and floods. There can be no protection against crises without social protection.

Germany is pursuing the goal of human security through its development policy, because security is about more than the absence of danger to life and limb. Human security is about people being able to meet basic needs such as adequate food and nutrition and lead a self-determined life. Social-security systems can reach even the poorest of the poor. That is why social protection is also a key-building block in the fight against hunger and poverty. It guarantees food security in times of crisis and is a shield against downward spirals.

That is why I am making it a priority to assist partner countries in setting up and expanding social-security systems. We are doing this not on our own but in collaboration with multilateral and bilateral partners. We made a start this year as part of Germany's G7 Presidency. Our aim is to increase the number of people with social protection by one billion between now and 2025.

We are working on coordinated financing mechanisms, joint country analyses and monitoring and coordinated support for our partner countries in order to scale up best practice examples and approaches. We have discovered that social-security programmes have a lot of potential not only to fight poverty and strengthen crisis resilience but also to contribute significantly to food security more generally – for instance, if benefits such as cash and in-kind transfers are tied to participation in health and nutrition counselling or are earmarked for buying food.

Many countries, including in the global south, are financing their social-protection schemes themselves. Germany is using its development cooperation (in close consultation with other donors) to assist its partner countries with, in particular, maintaining their social-security systems in times of crisis. A critical factor is tailoring the solutions to local conditions, because the needs of partner countries vary, as do their capacities to provide their own inputs.

It is important to us to harmonise our action, for instance with the development

banks or UN organisations. In Rwanda, for example, Germany is advancing structural reforms in already existing social-security systems based on a World Bank programme that provides budget support. These reforms are aimed at increasing the number of beneficiaries and improving the performance of administrative and implementing structures, for instance via a new social register to provide better records on who is entitled to benefits. An additional technical cooperation component ensures that the investments are sustainable, for instance thanks to additional local skilled staff and training for existing staff.

Social safety net programmes help to overcome the big challenges of our time – the impact of climate change, hunger, inequality and preventing pandemics. That is why I lobbied at the World Bank meeting last October and again at the UN climate conference in November for strengthening social-protection systems. In addition, in order to advance the issue of social protection and get even more partners on board, next year the BMZ will be convening its first international conference on this topic. Social protection is a human right. Through our policymaking we want to give it more visibility.



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**Food security tends to be especially fragile in rural areas: farmers in Madagascar.**



Wheat harvest in the Kyiv region in August 2022 during Russia's war of aggression against Ukraine.

FOOD PRICES

## Speculation and high energy prices exacerbate hunger

**All countries, rich and poor, are currently groaning under the weight of high food prices. Not only are households forced to turn to cheaper, less healthy food; the poorest in society face a truly existential threat: the number of people starving in the world started to rise again in 2020. Some high prices are only indirectly due to food shortages; the major drivers are food speculation and high fossil fuel prices. Solutions are needed for this.**

By Francisco Mari

After around two years of coronavirus pandemic, the monthly food price index published by the UN Food and Agriculture Organization (FAO) showed a year-on-year surge of more than 30% at the end of 2021. This came after nearly ten years of relatively stable prices. The FAO index is based on the international prices of meat, dairy, cereals, sugar and vegetable oils. While rice and sugar prices showed only a moderate rise, the price of vegetable oils doubled.

As a result, even households in countries that are not so dependent on world prices faced higher food bills in 2021. In the Global South especially, people cut their food intake and did without fresh foods such as fruit and vegetables. Few countries could afford to offer “bread subsidies” or social-protection programmes to cushion the impact of the high prices. Developing countries in particular had no resources for such support because their budgets were severely strained by the economic impacts of the pandemic, rising national debt and a weakening currency.

On top of what was already a global food price crisis, Russia's war of aggression against Ukraine triggered a surge in prices – especially for wheat – that dwarfed those seen in the 2006 food crisis in terms of both price spikes and volatility. Within days, the price of wheat – which was already high – rose by 50%.

The international financial markets were partly responsible for that. Anticipating high profits, investors, led by index

funds, deployed massive amounts of capital, speculating on trade deals for the 2022 summer harvest and betting on lower grain exports from the Black Sea region, the investigative news platform Lighthouse Reports revealed. In May 2022, Russia's war of aggression with port blockades pushed the price of a metric ton of wheat to a record of € 438 (2019: € 175).

The massive volatility of prices on the wheat exchange and the large number of financial transactions by a small number of players do not alone explain the rise in prices across the entire food range. But the above-average number of speculative transactions keeps the world-market wheat price high. Both the US and the EU actually have ‘position limit’ rules that are designed to restrict speculation in food markets. However, they have not been applied by regulators – evidence of the extent to which the financial sector has successfully undermined the instrument of “market regulation”.

The irony – and it has been so since the start of the price surge in 2020 – is that there is no evidence of the most plausible reason for an increase in prices, namely a failure of world wheat harvests, neither before nor after the start of the war. 2021 harvest volumes were not much lower than in previous years and the 2022 harvests, which are now almost complete, are expected to stay at the same level.

Supply on export markets – with the exception of vegetable oils – is also stable.

After Russia and Ukraine signed the UN agreement in Istanbul, that was even true of wheat. At the end of October, however, Russia cancelled that agreement. What price impact that will have internationally is hard to predict. The fact that price of wheat and other grains hardly responded to good harvests in recent weeks is related to speculators' expectation that Russia might return to weaponising supply shortages.

Another reason why the price of cereals and other foodstuffs, such as meat, dairy products, sugar and vegetable oils, started rising well before Russia's act of aggression is that food producers are so dependent on the price of energy (Kirikkaleli et al., 2021).

### HALF OF THE COSTS OF GROWING WHEAT

Expenditures on fuel for vehicles and machinery and on energy for the manufacture of agricultural inputs such as feed, fertilisers and plant-protection products generally account for almost half the cost of growing wheat. And that is without the energy required for transport, storage and processing – into flour, for example, which additionally reduces the volume of wheat by almost 25-30%. So grain, meat and dairy prices depend on the price of energy.

This dependence keeps growing as industrial intensive farming spreads and is very much in the interest of big agribusiness, which invariably has the same answers for boosting yields: more agrochemicals and pesticides on fields, bigger machines and even more shipments across the world's oceans. Judged by the multinationals' earnings, the system works perfectly well, especially when fossil fuels are available at low cost. The cost of damage to soils, biodiversity and the climate is not shouldered by the polluters but by the community.

Until fossil fuels are completely phased-out to protect the earth's climate, gas and oil prices are likely to remain high, so there is a growing urgency to address the question of a radical restructuring of food systems. Voices in the Global South calling for a reversal or a radical reduction of their own food supply's dependence on the global roulette of industrial agriculture are growing louder and louder. The escalation of the grain and vegetable oil price crisis due to Russia's war on Ukraine has thus also revealed many countries' reliance on food imports.

However, when listing the countries dependent on Ukrainian or Russian wheat, care should be taken to consider not just the degree of import dependency but also actual volumes of imports. The percentage of daily calorie intake accounted for by wheat products is a better indicator for that. Niger and Egypt, for example, have a roughly equal dependence on wheat imports (90%) via the Black Sea. However, wheat products in Egypt account for a third of daily calorie intake, whereas in Niger they account for just one percent.

Nevertheless, the main medium-term response to the crisis for most countries must be to increase their own food production and become less dependent on imports. Respecting the human right to adequate food – a sufficient, healthy, balanced nutrition – is an obligation for every individual country and for the international community. The increase in the number of people suffering acute hunger due to the food price crisis, the failure to reduce the high number of people who are chronically hungry and the fact that 2.3 billion people cannot afford healthy food remain a scandalous violation of human rights.

Since 70-80% of total food production still comes from family farms, it is crucial to recognise that those farms have a key role to play in eradicating hunger, reducing import dependency and lowering food prices. However, the campaign against import dependency, as now propagated by develop-

ing country governments, international donors like Germany's Federal Ministry for Economic Cooperation and Development (BMZ) and the World Bank, must not lead to greater dependence on imported hybrid seed, chemical fertilisers or pesticides. This would replace one form of fossil fuel dependence (food) with another (inputs).

And – mindful of the ban now lifted in Kenya under pressure from the US and its agribusiness corporations – there must definitely be no policy to make development funding and aid shipments dependent on acceptance of genetically modified seed, which locks farming into the industrial agricultural model.

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**Baker in Cairo: Wheat plays a major role in Egypt.**

## Post-fossil agroecological transformation

Switching food production entirely to site-appropriate agroecological concepts is the best answer to the current food price and hunger crisis. It offers farmers a chance to dispense with costly agrochemical products and means a new variety of local, healthy food products for consumers. Stepping away from imports would also mean a sharp reduction in nutrient-poor grain crops such as maize or rice as well as promoting self-sufficiency, which cushions (price) crises for families.

At the latest session of the UN Committee on World Food Security (CFS) in October 2022, millions of farmers and their representatives demanded this transition to a different, post-fossil food system as their contribution to solving the food price and hunger crisis. Industrialised countries must also accept and support the concept of food sovereignty (CSIPM, 2022).

It is unacceptable that, within the framework of the GAFS food initiative (Global Alliance for Food Security) initiated by the German Federal Ministry for Economic Cooperation and Development (BMZ), the World Bank plans to make \$30 billion in loans available to developing countries to buy fertiliser for upcoming harvests. Ultimately, this outlay will mainly boost the profits of big agribusiness. Part of the medium-term support provided needs to be used to promote the kind of agroecological transition that the BMZ itself, along with development organisations such as Brot für

die Welt (Bread for the World), have been promoting and supporting for years.

But the industrialised world also needs to transform its agriculture so that, after a hopefully early end to the food price crisis and to Russia's unscrupulous weaponisation of hunger, subsidised grain, milk and meat from the EU do not flood markets again in the Global South. This disrupts local agricultural production and pushes small farmers out of their markets.

This also necessitates changes in the trade system so that developing countries are not forced by World Trade Organization (WTO) rules or bilateral agreements to keep their markets open to EU products. This is the only way they can protect local production. Developing countries also need to be allowed to pay subsidies

to encourage production and to form public stocks to mitigate price and volume crises. Egypt and India have shown in the current crisis that price-support programmes of this kind have helped the poorest but are not sufficient to prevent a rise in hunger if all foodstuffs that need to be purchased become more expensive.

Criticising countries in such situations for imposing export restrictions to prevent their subsidised grain from furnishing profits for traders on the world market smacks of hypocrisy. In June, the agriculture ministers of the seven leading Western industrialised countries (G7) criticised India's decision to ban the export of wheat with immediate effect.

If the United States, Canada, France or Germany really want more export volumes to combat the high price of wheat, speculators or Putin, they have millions of tons of grain currently used for animal feed or fuel that could be allocated to human food. This may be sorely needed if Russia

again obstructs wheat production in Ukraine or if next year's harvests around the world – as many experts predict – are a great deal lower due to high fertiliser prices.

The fact that associations and big agribusiness are instead exploiting the global food and price crisis to pressure Europe and Germany to step up energy-intensive production and demand that even the slightest progress towards sustainable restructuring of European agriculture should be rolled back is not only shameless lobbying; it is the surest way to bring on the next hunger, energy and price crisis. FM

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**Small-scale traditional farming, like here in Nepal, has an important role to play in the transformation of agroeconomic systems.**

## FARMING

## Slowly rising health awareness

**As the world's fifth largest economy, India is among the most important food producing countries. Nonetheless, about 70% of 1.4 billion people cannot afford a balanced diet. The big question is: how will the country feed its people? Traditional cereals such as millets could be an important part of the answer.**

By Roli Mahajan

India is self-sufficient in cereals production. This huge country also accounts for 21% of the world's milk, ranks second in fish production and third in egg production. However, 224 million people are undernourished, and they make up almost one quarter of undernourished people around the world. These data are from the UN report "The State of Food Security and Nutrition in the World 2022".

Malnutrition has serious impacts. Official Indian statistics for the years 2019 to 2021 show that more than 35% of children under the age of five were stunted, which means that inadequate diets hampered their physical and mental development. The share was 30.1% in urban areas and 37.3% in rural areas. Some 187 million women suffer anaemia moreover.

After long decades of progress, food security has actually been deteriorating again in recent years. In 2021, a survey of 6700 households in 14 Indian states showed that 79% of households suffered some kind of food insecurity. One quarter of the respondents reported severe food insecurity. Several independent organisations, including the Right to Food Campaign and the Centre for Equity Studies, ran the survey and published it under the title "Hunger Watch".

Other sources confirm the downward trend. One example is the Global Hunger Index, which the two international non-governmental organisations Concern Worldwide (based in Ireland) and Welthungerhilfe (Germany) compile every year. The 2021 issue showed India having dropped to the 101<sup>st</sup> rank among 116 nations from the 94<sup>th</sup> one year earlier. India had fallen behind

its neighbours Pakistan, Bangladesh and Nepal. The reasons were the impacts of Covid-19 and several harvests lost to drought.

In response to the pandemic-induced hunger crisis, India's central government launched aid programmes such as the Pradhan Mantri Garib Kalyan Anna Yojana, delivering free rice and wheat to population groups in need. Existing schemes continued to provide subsidised staple foods to poor people who have ration cards. About 60% of India's people currently depend on subsidised governmental cereal provisions, mostly rice and wheat.

Experts bemoan that this approach only ensures a sufficient calorie intake, but not healthy diets with adequate nutrients, including vitamins and proteins. Part of the

malnutrition challenge, moreover, is that processed food with high contents of fat, sugar or salt is often cheaper than healthy goods like fruits and vegetables. Processed food also provides more calories. Summers of drought and the war in Ukraine, moreover, have accelerated food-price inflation.

Nutrition experts recommend revitalising the production of millets and other traditional cereals in order to ensure more people enjoy more balanced diets. Millets are nutrient rich, as they contain fibres, iron and some vitamins. They are the staple food of about 90 million people in Africa and Asia, though they are often disparaged as a poor person's food.

In the past, millets were a staple food in India too. When the nation became independent in 1947, this crop accounted for 40% of India's cereal harvest. Things changed in the course of the green revolution. The government wanted to achieve national self-sufficiency and promoted rice and wheat cultivation. Commercial farming began to rely on high-yielding varieties of



Farmer harvesting millets in Rajasthan.

these two species along with the use of machinery, fertilisers and pesticides.

Intensive agriculture is not sustainable however. It is resource intensive and still focuses on rice and wheat. The heavy use of agrochemicals degrades soils. Moreover, intensive farming is limited to certain regions.

After markets were liberalised in the 1990s, urban demand for processed foods became more prominent. The content of fat, sugar and salt tends to be high. Among Indian consumers, awareness of healthy diets is only growing slowly.

### REDISCOVERED AND IMPROVED MILLETS

The qualities of millets, however, are being appreciated again. This kind of cereals contains valuable nutrients. The plants grow fast and can be cultivated in almost every tropical climate. Production, moreover, only causes minor carbon emissions. According to the central government, millets production increased from 14.5 million tonnes in the fiscal year 2015/16 to 18 million tonnes

in 2020/21. Indeed, India celebrated 2018 as the “year of millets”.

Many Indian states have since launched programmes to promote cultivation. India was instrumental in the UN announcement to declare 2023 the “international year of millets”. In this context, Indian government agencies keep promoting millets. Nirmala Sitharaman, the finance minister, recently announced a start-up competition to stimulate innovations along the entire millets supply chain.

Mahalingam Govindaraj, an Indian agri-scientist, recently won a prestigious international prize, the Norman Borlaug Award. He used to work for ICRISAT, the Hyderabad-based International Crops Research Institute for the Semi-Arid Tropics, where he directed the development and dissemination of high-yielding, high-iron and high-zinc pearl millet varieties.

His success has stimulated further biofortification efforts in India. Biofortification means that plants are bred with an eye to increasing their nutrient content. The ap-

proach can help to reduce the micronutrient-deficiencies many people suffer.

According to estimates, more than 9 million Indians will be eating biofortified millets by 2024. Farmers report increasing demand, including in urban areas. Market access remains a challenge, however, so farm families only get a rather small share of the price that the end consumers pay. It also matters that it is impossible to achieve yields as high as are achieved with rice or wheat. Moreover, village infrastructure must improve, including for the processing of produce.

Millets are certainly not some kind of silver bullet for solving all food-related problems in India, but they definitely can play an important part in improving food security.



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### BIOTECHNOLOGY

## Why Uganda does not have a GMO law

**In the fight against hunger, some see genetic modification as key. In the eyes of others, the risk of negative impacts outweigh potential benefits. In Uganda, this is still basically a theoretical debate. There is no law that would regulate genetically modified organisms (GMOs), but the industry needs such a law to take off in full swing.**

By Ronald Ssegujja Ssekandi

Agriculture is the most important industry in Uganda, both in regard to local demand and exports. Many people’s livelihoods depend on rain-fed farming. Subsistence farming is common moreover. Not everyone gets

enough to eat. According to the FAO, the UN Food and Agriculture Organization, almost one fifth of Uganda’s population suffered severe food insecurity in 2020. The World Bank estimates that half of the population was moderately food insecure after the second coronavirus lockdown in 2021.

One reason for persisting food insecurity is the climate crisis. As precipitation patterns change, recurring drought haunts many areas. On the other hand, extreme weather caused devastating floods in 2022 (see box on page 27).

It also matters that more refugees live in Uganda than in any other African country. Over 1.5 million people have fled from

violent conflict in neighbouring countries, especially South Sudan and the Democratic Republic of the Congo. All of them need food. Not quite 50 million people are currently living in Uganda.

Genetic engineering is considered an option for improving food security. According to some experts, it could serve to triple the yields of specific cultivars. Plants can be modified in ways that make them more resistant to pests or drought. Genetic modification can also lead to higher nutrient content. On the other hand, gen-technologists





**Agriculture in Uganda: For smallholders, the use of GMO could lead to dependence on corporations.**

have made cultivars herbicide resistant, which allows commercial farmers to radically increase the use of both fertilizer and pesticides. Approaches of this kind harm the ecosystem and require expensive inputs.

Due to global heating, Uganda will most likely experience more drought in the future. The prospect of farmers' plants needing less water is alluring. Given that the population is currently growing by more than three percent per year, higher yields would be most welcome as well.

So far, Uganda does not have a law to regulate GMOs. Accordingly, farmers shy away from them. Legislators have not defined who would be liable for undesired side-effects. Intellectual property rights have not been spelt out either. Monica Musenero, the science minister, says legislation is needed to promote research and make risks manageable. "It is the laws that will ensure our products are trusted and are of good quality," she said.

Legislation has been stalled for years however. President Yoweri Museveni has twice (in 2017 and 2019) refused to sign a law approved by the Parliament. He demanded improvements, and there has been no breakthrough since.

The head of state belongs to those who fear that GMO use might alter human DNA, so he demanded that it be limited to

plants and domestic animals and exclude human beings. Also, Museveni fears that GMO will put biodiversity at risk. He wants the future law to demand the establishment of gene and seed banks in order to store and safeguard animal and plant species used in agriculture. Experts, however, point out that biodiversity is in constant evolution, so storing genetic information is insufficient. If the genetic material is to remain valuable, traditionally used varieties must evolve in the ecosystems they are adapted to (see Parvis Koohafkan on page 30).

### **SMALLHOLDERS LESS LIKELY TO PROFIT**

In Uganda and in other developing countries, smallholder farmers are far less likely to profit from genetic engineering than large agribusinesses and the multinational producers of seed and agrochemicals. They are at risk of becoming dependent on those multinationals, for instance if they have to buy new seed annually along with expensive fertilisers and pesticides.

GMO sceptics point out that it would be feasible to irrigate much more land in Uganda. Expanding irrigation would increase yields without running any kind of GMO-related risk.

"Food security is the least convincing argument for GMOs, especially when

it comes in intemperate interventions by foreigners with undisclosed interests," says Mary Serumaga, a Ugandan researcher and activist. She accuses foreign investors and prosperous nations of taking decisions without involving the people who are actually exposed to food insecurity. Smallholders, she points out, are hardly represented in the relevant multilateral negotiations. The debate regarding a GMO law continues in Uganda.

In the meantime, Uganda is involved in scientific cooperation geared to boosting farm productivity. The National Agricultural Research Organization (NARO) was established in 2005. In 2020, it joined the "Feed the Future" initiative of USAID (United States Agency for international Development).

The programme covers several developing countries. The idea is to promote technologies that deliver higher yields and more nutrients, not necessarily based on genetic engineering. Previously, USAID had introduced a non-GMO orange-fleshed sweet potato (OFSP) with high vitamin-A content in Uganda.



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## Extreme rain in Uganda

Extreme weather conditions continue to haunt many parts of the world, causing massive devastation, including in agriculture. The realities of the climate crisis are becoming increasingly obvious – for example in Uganda.

This year, the long-awaited rain-season resulted in flooding in many parts of the country. The impacts were worst in areas with fragile ecosystems, such as hilly and mountainous areas, forests, riverbanks, lakeshores and rangelands. Compounding the problems, these areas have been exposed to encroachments and degradation in recent years. It matters that the population has grown from 23 million to almost 50 million since the turn of the millennium. In the course of industrialisation, pollution levels are increasing. The country is thus facing multiple environmental challenges.

The impacts of global heating are proving particularly disruptive. Droughts, floods, storms, heat waves and landslides are rampant, denting agricultural production and reducing food security. Moreover, hygiene conditions have deteriorated in areas that faced prolonged rains. The cholera risk has grown accordingly.

Communities have suffered immensely. In August and September, floods claimed more than 60 lives, according to reports. Many people have lost their homes. A humanitarian crisis is brewing. Relief agencies had to step in. The worst affected areas are in the Elgon, Southwestern, Lango and West Nile subregions.

Uganda's current problems are not getting much international attention. The floods that submerged about one third of Pakistan made headlines around the world.

Compared with Pakistan's flood disaster, the Ugandan numbers are indeed small. About 90,000 persons were directly affected. Their suffering is real, of course. The full truth is that the climate crisis is hurting far more people around the world than the media's focus on only the worst cases would have you believe.

Uganda's economy largely depends on farmers. Most of them rely on rainfed agriculture. Many of them worry about the harvest. "The rains are good for us," said Kasasa Emmanuel, a farmer from Wakiso district, in the summer, "but if they continue falling as heavily, our crops may be destroyed." However, experts still expected the harvest to be good, especially

in areas that did not see excessive rainfall.

What is critical at this point, according to Alex Businge of the consultancy Harvest Agriculture Solutions, "is to strengthen early-warning systems". Alerting people, after all, helps to reduce the damage extreme weather can do.

Early-warning systems, however, are only one component of adapting to global heating. Weather patterns are changing, and that affects multiple sectors apart from farming. There are repercussions for water supply, human health and settlements and infrastructure in general, for example.

Julius Mucunguzi, a government official, says: "The long-term solution is to protect the environment, stay clear of wetlands, riverbanks and avoid destroying river pathways." In his eyes, climate change is undeniable. "You can no longer predict when the rains will come and how intense they will be," he adds.

In Uganda and many other developing countries,

national governments tend to be overwhelmed. Inflation, which arose from impacts of prolonged Covid-19 lockdowns and has been exacerbated by commodities becoming more scarce and expensive due to Russia's invasion of Ukraine, is causing hardship.

Least-developed countries deserve compensations for damages they did little to cause, so major polluters must be held accountable. We need an international agreement on "loss and damage" (see Saleemul Huq on [www.dandc.eu](http://www.dandc.eu)).

Our governments must find and implement local solutions moreover. Nature-based options make sense. They are comparatively cheap and highly effective, serving both adaptation and mitigation (see David Mfitumukiza on [www.dandc.eu](http://www.dandc.eu)).

Short-term needs tend to divert attention from long-term needs. The international community, however, cannot afford to neglect the climate crisis. We must not allow problems to spin out of control. RSS



**The suffering is real – assessing the death toll in Kasese, Uganda, in early September.**

FARMING

# “Business as usual is not an option”

**Large-scale agriculture must be made environment-friendly, says Mathias Mogge of Welthungerhilfe, while smallholder farmers must intensify production in eco-friendly ways. He wants policymakers to change course accordingly.**

**Mathias Mogge interviewed by Hans Dembowski**

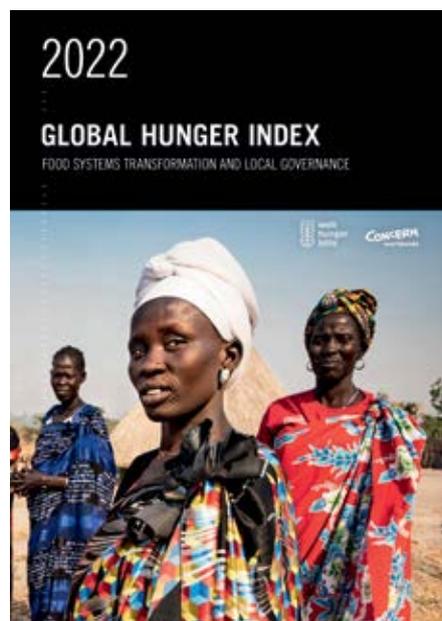
**Humanity is currently not making progress in the fight against hunger, and things are actually getting worse in many places. According to your recently published Global Hunger Index 2022, some 828 million people did not get enough to eat last year. What difference has Russia’s attack on Ukraine made in this context?**

It has worsened the need of humanitarian assistance and made the international community aware of just how important grain exports are from both Ukraine and Russia. Import nations depend on shipments of wheat as well as sunflower oil. As exports across the Black Sea stalled, world-market prices rose fast. Due to Covid-19 related supply-chain disruptions, prices had been unusually high even before the war. Today, the FAO’s world-food price index is still quite high, but it has fallen below the record levels of April/May. The situation is nonetheless still alarming because consumer prices are still very high almost everywhere, and even in high-income countries like the USA or Germany, ever more people depend on food banks.

**What are the implications for agricultural policy?**

Well, the current crisis triggers and reinforces many questions. What should be the future of world trade in agricultural goods? How must the EU’s common agricultural policy change? Which approaches should be taken in cooperation with developing countries? The ongoing debate is hot, and one thing is obvious: business as usual is not an option. We have been discussing en-

vironmental problems for quite some time, including the resource and energy intensity of large-scale agriculture, the climate crisis and the erosion of biodiversity. Now we see clearly that the current system actually makes food security quite fragile.



<https://www.globalhungerindex.org/download/all.html>

**What kind of reforms are needed?**

Three things are essential:

- Large farms and livestock systems must be made environment-friendly.
- Smallholder farms must intensify production in ways that do not deplete soils and other valuable resources.
- Regional marketing systems must include smallholders’ produce.

These are complex challenges. Policymakers must change course. The criteria for subsidies must change. We need support for diversification. Fertilisers and pesticides have to be used in a targeted and sparing manner. Moreover, competent advice for

smallholders is absolutely indispensable, and it must take into account local specifics. Another vital issue is that smallholder farmers must become starting points of regional supply chains, for instance of supermarkets.

**Rural extension services in developing countries and emerging markets have hardly been providing that kind of advice, have they?**

No, unfortunately not, even though smallholders are very important. Their traditional knowledge fits the local environment, so they understand, for example, how to use of great variety of landrace seeds, which can be helpful for breeding high-yielding varieties. Humanity can neither afford to lose the genetic diversity of traditional cultivars nor the related knowledge (see Parviz Koohafkan on page 30). It also matters that smallholder farming is the only kind of social safety net available in remote rural areas. It should ensure a minimum level of foods as well as incomes.

**Many people consider village communities to be backward.**

That is a misconception. Smallholders are clever entrepreneurs. They know exactly what they want and need. They are keen on know-how and digital opportunities. We have introduced a mobile phone app that supports collective use of machinery, for example. It is very popular and called AgriShare. People want to be involved and have a say in decision-making.

**Is it feasible to boost smallholders’ productivity with agri-science?**

Yes it is, and I have seen it happen when I was working for Welthungerhilfe in Mali. At the time, ICRISAT, the International Crops Research Institute for the Semi-Arid-Tropics was breeding its iron and zinc rich pearl millets (see Roli Mahajan on page 24). That project was spectacularly successful, and farmers were continuously involved, which was only possible because exchange did not only happen in English or French, but African languages too. ICRISAT’s head office is in India, but it has regional offices in Africa.

**The innovative ICRISAT millets are not traditional landraces, however.**

So what? We shouldn’t think in terms of either/or in the sense of only traditional varieties being acceptable in contrast to newly



**Bavarian dairy barn: industrial-scale livestock production is environmentally harmful.**

livers good results, it starts promoting that approach itself. It wants to succeed after all.

### **Must nations with high incomes consume less meat and milk?**

The current patterns of livestock production violate animal welfare, harm the climate, squander resources and deplete biodiversity. The production of animal feed requires huge amounts of water, fertiliser, pesticides and energy. Our wasteful lifestyle is plainly unsustainable. In my eyes, this isn't really about renunciation; there are opportunities. It is healthy to eat plant-based proteins instead of animal-based proteins, and they taste good.

### **How do you assess the role of multilateral institutions – do they mostly serve the interests of prosperous nations?**

No, I do not think so. In my eyes, they serve building consensus, which is often difficult. These institutions are important, and their policies change in the course of time. World Bank statements on sovereign debt, for instance, were more generous in the coronavirus crisis than what we were used to in the past. Emerging markets and developing countries, moreover, have become more self-confident and assertive. At the same time, political polarisation is increasingly making the cooperation we urgently need more difficult. Just consider Russia's invasion of Ukraine. It is important to maintain multilateral exchange in times of crisis nonetheless. In particular, it would be good to strengthen democratically inclusive models such as the UN Committee on Food Security, in which representatives of smallholders and indigenous communities have a say.

bred ones. After all, the landraces have been bred continuously for century after century. What matters is boosting productivity without harming local ecosystems, and the interaction of scientists and farmers is indispensable for that purpose. At Welthungerhilfe, we will increase our efforts in this regard.

### **What else must policymakers in developing countries bear in mind?**

Their goal must be diverse, healthy and nutritious diets for everyone. It is wrong to focus only on producing as many calories as possible. That approach often dates back to the colonial era, without which, for example, maize would not be so important in Africa today. Moreover, the relevance of municipal and other subnational agencies is typically underestimated. We are increasing our efforts to promote good governance at the local level. Local communities must be supported to hold mayors, district administrations or state governments accountable. Welthungerhilfe provides advice and funding to local partners, and they are in the driver's seat.

### **What issues are at stake in subnational governance?**

Relevant issues include education and health care as well as farm subsidies and extension services. Local infrastructure, moreover, is of great relevance. Things like roads, water supply, electricity et cetera are costly but indispensable. Smallholder farms, after all, cannot flourish without access to markets and processing companies. As subnational institutions have a bearing on these matters, it makes sense for civil society to put pressure on them. At the same time, civil-society organisations must help local people understand what, for example, the national agricultural policy is geared to.

**All over the world, farmers with huge land holdings dominate lobbying efforts. The reason is that smallholders are working so hard on their farms that they cannot play a major role in farmers unions. As a result, state subsidies typically help the strong grow stronger, without doing much for the weak.**

Nonetheless, experience shows that civil-society mobilisation can make a difference. Liberia's land reform was a great success in the sense of improving women's access to land for instance. Civil-society activism can initiate constructive dialogue, and once a government sees that an inclusive approach de-

### **LINK**

**Global Hunger Index 2022:**

<https://www.globalhungerindex.org/download/all.html>



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Small, but highly diversified agro-forestry farm on a slope of Mount Kilimanjaro.

### SMALLHOLDER FARMERS

# Neglected, but essential heritage

**It may sound counterintuitive, but the future of human civilisation depends on impoverished farming communities in remote rural areas of developing countries and emerging markets. They are the guardians of indispensable knowledge and resources – and should be rewarded for their valuable services to the international community.**

By Parviz Koohafkan

Family farms and traditional agriculture deserve far more attention in policymaking than they are getting. They are indispensable for global food security. Data from the UN Food and Agriculture Organization (FAO) revealed that farms with fewer than five hectares produced more than 70% of humanity's food in 2014. As the UN Sustainable Development Goals (SDGs) cannot be achieved without smallholders, the future of human civilisation hinges on them.

Traditional family farming

- provides highly diversified food products, which contribute to healthy diets,

- offers livelihoods in rural areas where unemployment is a major problem,
- utilises and conserves agrobiodiversity and
- is well adapted to local ecosystems and thus helps to protect invaluable ecosystem services.

It also matters that traditional farming is based on ancestral knowledge. Though not appreciated by all scientists, it is the basis for agricultural innovations and technologies. For example, breeders of high-yielding varieties typically use genetic information from age-old landraces.

The farmers concerned are mostly very poor. They often belong to indigenous and other marginalised communities. It is ironic that some of the world's poorest and most neglected communities are in charge of vitally important agriculture systems. These rural communities deserve to be rewarded for the work they are doing, and their culture must not be suppressed or displaced. It must be allowed to evolve in ways that improve their quality of life.

Agricultural policies, so far, have been mostly guided by a distorted idea of modernisation. The focus on industrial-scale farming to maximise yields has led to

- unsustainable practices,
- over-exploitation of resources,
- genetic erosion,
- loss of fertile soils,
- imports of exotic domesticated species,
- loss of local knowledge systems and rural values,
- socio-economic instability and
- displacement of marginalised people.

This kind of high-tech agriculture is not the answer to the multiple problems that haunt humankind. A different approach is needed. Smallholders, family farms and indigenous groups should not be looked down upon. Their production systems should be carefully intensified. It makes sense to use new methods that

- lower environmental impacts,
- can be applied more precisely and
- reduce waste in processing, transport and marketing.

In many parts of the world, traditional agriculture systems have collapsed or disappeared. That is especially so in supposedly “advanced” nations. Nonetheless, millions of hectares are still under traditional farm management, with raised fields, terraces, polycultures (with different crops growing in the same field), agroforestry systems et cetera. The stubborn persistence of these practices is evidence of smallholders' creativity and resilience. They have stuck to local strategies and kept developing them in ways that serve their needs and are tailored to their local resources and environment.

### HISTORY OF MARGINALISATION

Unfortunately, these local communities have a long history of being neglected. What was prioritised instead was to increase farm production with price subsidies, intensive practices, specialisation and new technologies. As argued above, the price was very high in both socio-economic and environmental terms. Rural poverty has indeed worsened, and migration to urban slums is occurring in many places.

By contrast, diversified, eco-friendly farming with multi-cropping and various forms of animal husbandry was only rarely promoted. There is a general lack of sup-

port for smallholders and especially indigenous farming communities. Precious little research is done to improve their lot. As a result, the foundations of their agricultural “culture” are being eroded. The biodiversity they have been guarding is disappearing as well. The basis for developing sustainable agricultural systems should therefore be the very systems that traditional family farmers have inherited and incrementally modified over centuries. These systems are complex and well adapted to the local conditions. Indeed, smallholders have managed to cope with very harsh environments. Most of their production systems do not depend on external inputs and technologies, but have nonetheless safeguarded communities’ basic food security and covered their subsistence needs in the course of history.

Humanity needs models of agriculture that allow us to eradicate poverty (SDG1) and end hunger (SDG2). Other SDGs, such as climate action (SDG13) or the protection and restoration of ecosystems on land (SDG15), matter too, of course. We need agriculture that is productive, environment-friendly, biodiverse and socially just. The community-based systems which have fed humankind throughout history meet these criteria. And they still feed masses of people in disadvantaged world regions.

In appreciation of their relevance, the author, as the Task Manager of the Agenda 21 on behalf of the FAO, launched a programme called GIAHS 20 years ago. The letters stand for Globally Important Agricultural Heritage System (see box next page).

### FOCUS ON SMALLHOLDERS’ NEEDS

Sustainability must be first ensured at the local level. The logical consequence is that agriculture systems should fit the existing socioeconomic and natural environment. Time-tested community-based systems must not be uprooted or displaced. They must be carefully adopted and enhanced. This is a delicate challenge because there is no blueprint that would fit every situation. Every local system is special. To boost its productivity, one must understand the local ecosystem, relevant science and the local traditional knowledge. The new science of agroecology has its roots in these principals.

Since the early 1980s, hundreds of agroecology projects have been undertaken. They were driven by farmers organisations,



**These Moroccan goats climb nutritious argan trees to feed – and a specific local tradition in China is aquaculture in rice fields.**

visionary scientists and non-governmental organisations. To a minor extent, state agencies were involved too. Experience shows that it is possible to blend traditional knowledge with new scientific insights. This approach serves to increase productivity and improve food security without harming the natural environment. There is an important socio-cultural angle too. The future sustainability of agriculture depends on young people staying in rural areas, implementing farming innovations and creating sustainable livelihoods. If they do not see a future for themselves in the villages, they will leave.

Local food sovereignty, moreover, matters very much. It is based on local autonomy in regard to production, processing, marketing and consumption. Important preconditions are that farmers have appropriate access to land, seeds, water, technology and energy. Farmer-to-farmer networks tend to be very useful in this context.

Local food sovereignty also means that farming communities must not depend on imported inputs from large multinational corporations. The background is that private-sector giants have a pattern of forcing clients to relying on innovations that enhance corporate profits along with the yields, but do not necessarily improve farming communities’ welfare. Around the world, scientific agricultural researchers

should therefore focus much more on the needs of smallholders and family farmers. Historical evidence shows that smallholder farms can play their vital part in

- poverty alleviation,
- economic growth,
- job creation and
- community empowerment.

To do so, they need to be supported by public policy and government-funded investments. Rural infrastructure is essential. Policymakers must not forget that smallholder provide food to local markets in a potentially resilient way, and their farms serve as social-safety nets.

The importance of dietary diversity must be recognised too. The combination of various crops and animals in traditional agroecosystems allows farmers to make good use of ecological niches; thus increasing the variety of locally available nutritious food. Indeed, opting for one variety of a crop instead of another can make the difference between micronutrient deficiency or micronutrient adequacy. The traditional landraces, which local communities have bred of millennia, have further vitally important qualities. Their diversity offers varieties that suit many different environmental circumstances, which is precisely why they are needed to create high-yielding varieties of rice, wheat and maize.

Global food security cannot be sustainably achieved without the local plant-genetic resources and the traditional knowledge of marginalised farming communities in many world regions. Their own food security, moreover, will benefit from incremental change geared to higher productivity.

The plain truth is that some of the world’s poorest people are the best custodians of genetic resources and other natural resources, environmental services as well as cultural inheritance. Improving their lot is the appropriate approach to ending hunger.



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## Globally important heritage

The UN Food and Agriculture Organization (FAO) is committed to protecting Globally Important Agricultural Heritage Systems. According to the FAO website, a GIAHS is an agroecosystem inhabited by a community that lives in an intricate relationship with its territory. The FAO's GIAHS programme has designated close to 70 sites in over 22 countries as relevant. These sites typically have remarkable agrobiodiversity as well as invaluable cultures and landscapes. Local communities manage them according to age old traditional knowledge.

Over centuries, many generations of farmers, fisher folk and herders developed these complex production systems, which suit the local environment well. The systems' resilience is time-tested. The result is basic food security and livelihoods, as well as the conservation of natural resources, including biodiversity. Because a GIAHS represents a unique wealth of knowledge and resources it is indeed of international relevance.

The GIAHS programme is designed to identify such areas and protect them. The approach is in line with several international agreements, such as the UN Convention on Biological Diversity (CBD) or the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Obviously, national governments and other national and international organisations must play their part too.

A GIAHS must not be misunderstood as a kind of mu-

seum. It is not a UNESCO World Heritage Site and must not be frozen in time. Throughout history, local communities have kept modifying and improving traditional practices. They must not stop doing so. The result would be degradation of the ecosystem and further impoverishment of its people. The resilience of a GIAHS depends on its peoples to adapt to new



Rice terraces in the Philippines.

challenges without sacrificing, biological resources, cultural wealth or productive capacity. Local communities thus deserve support for enhancing the productivity of their fields, flocks, fisheries and forests.

The big challenge is to balance goals of conservation and development. They are not always compatible. It is essential to identify what might erode biodiversity and traditional knowledge. The goal must be to improve livelihoods without harming either. At the same time, local people could

derive benefits from conservation and sustainable resource. They could be paid for facilitating eco-system services. Eco-tourism and eco-labelling are options too.

Policymakers at national and international levels have been focusing on industrial-scale agriculture (see main story). Indeed, a GIAHS today typically survives in an environmentally challenging area where industrial-scale agriculture is not feasible. GIAHS communities, however, are put

The GIAHS programme is not about the past. It is about the future. The resilience of any agricultural system results from its level of diversity and its adaptation to the ecosystem. A GIAHS contains rich and unique agricultural biodiversity – both within and between species. Entire landscapes have been shaped by such interactions.

Dating back to ancient civilisations, many of these systems are linked to important centres where plant and animal species were originally domesticated millennia ago. Their in-situ conservation is of immense importance and global value. Gene banks are no alternative because they are frozen in time, while natural environments keep evolving.

Interventions must avoid cookie-cutter models. They must be locally specific and involve the local communities as decision-makers. The implication is that support for GIAHS communities will require ample resources and much time.

Therefore, each GIAHS must be accompanied by an Action Plan of Dynamic Conservation. Moreover, interventions must be experimental and flexible in design as well as content. Unfortunately, the FAO has concentrated more on the increasing the number of GIAHS and largely failed to properly provide concrete support to farming communities and implement action plans. Part of the challenge is therefore to make the general public understand how a GIAHS serves the global common good and thus deserves protection. PK

### LINK

GIAHS – FAO programme:  
<https://www.fao.org/giahs/en/>



[www.linkedin.com/company/d-c-development-and-cooperation](http://www.linkedin.com/company/d-c-development-and-cooperation)



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