

Agriculture and food in question

C2A Note

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GUARANTEEING ACCESS TO WATER FOR FARMERS IN DEVELOPING COUNTRIES

Water is an essential resource for farmers in developing countries. They need it to produce food, irrigate their crops, water their livestock and maintain fish stocks, but competition over access to water is constantly intensifying due to demographic growth, industrialisation, urbanisation, and changing modes of production and consumption. Conflicts between farmers, businesses and rapidly expanding urban areas are multiplying around the world, sometimes erupting into violence.

Farmers in developing countries are the first casualties of such competition as they tend to have less political power than other more organised and powerful users. As access to water becomes increasingly restricted, many suffer the further injustice of being deprived of their historic rights to obtain this resource above or below ground. A growing number of farmers, herders and fishermen are finding it more and more difficult to access water.

About 75% of the 950 million people around the world who suffer from hunger live in rural areas. There is an urgent need to defend and safeguard the basic right of farmers in developing countries to access water. These producers have immense potential to meet the huge challenges posed by food security and territorial development, protect ecosystems and biodiversity, and maintain employment in rural areas. Safeguarding their access to water is a key aspect of responding to these challenges. This is something can be done at relatively little cost, but it does require genuine political will from governments and the international aid community.

The current situation

Family farming has the potential to be highly productive

Rain-fed and irrigated family farms can provide much of the additional food that the growing human population will need between now and 2050. The rainy areas where most underprivileged rural communities are found have the greatest potential to increase yields, and the key to this growth lies in water management.ⁱ It is also worth noting that a large proportion of land that is currently under-exploited could be irrigated if dilapidated irrigation systems were rehabilitated (not an expensive undertaking).

Farmers are vulnerable to climate change

Farmers in developing countries are among the first to feel the effects of climate change, especially in arid zones and areas where desertification is under way. Denying farmers access to water, which is a crucial production factor, effectively deprives them of the capacity to adapt to rainfall patterns that are becoming increasingly uncertain or limited in particular regions. Simple water collection techniques (drainage, capture,

storage) enable communities to maintain production activities and provide employment in fragile areas. These practices should be supported by a redefinition of the rules governing the distribution, access and use of this resource in irrigated and pastoral zones.

Farmers don't waste water!

70% of the fresh water taken from rivers and water tables is used for agriculture. This sector is often accused of being the most wasteful of water – but which kind of agriculture is responsible for such waste? We need to distinguish between different production models, as they use natural resources in different ways, and the water they release back into the system varies in quality. The water consumption of small Sahelian producers using hand-drawn water from wells on their home gardens cannot be compared with that of French farmers growing irrigated maize, or agri-businesses in Marrakech that tap into deep underground water tables to irrigate their tomatoes.

The traditional knowledge accumulated by individual farmers and farmer groups has been shown to be effective in terms of sustainable water management. This is often implemented at the territorial level at which farmers collectively capture, share and distribute the resource. All the communities within the territory can then benefit from the recovery and use of ground water and replenished water tables.

Such knowledge and practices should be recognised and promoted as an alternative to the dominant capital-intensive model of agriculture, which often consumes vast amounts of water. Because family farming often uses more ecologically sound and sustainable modes of production that deliver better quality water back into the system, agriculture can actually help preserve this resource, provided there is support for appropriate agricultural models.

Water distribution cannot be dictated by the market

In a context of so-called 'water scarcity', water multinationals and international institutions such as the World Bank have advocated various legal means of commoditising and negotiating rights to access and use water, arguing that the mechanisms for setting market prices will help facilitate the most 'productive' use of water. This commodification of the resource encourages uses that generate the greatest short-term economic returns, raising questions about the sustainability and social costs of such an approach to water management.

Farmers are the primary providers of foodstuffs and rural employment, and the guardians of biodiversity, yet they are marginalised by an open market for water because they lack the financial resources available to agro-industry, municipalities and the mining and tourism sectors. This system ultimately penalises all human societies.

Widening gaps caused by the water law in Chile:

In Chile, the Water Law of 1981 introduced negotiable rights to use water that are based on private ownership rather than allocation, and can be negotiated like a commodity. This law aimed to increase the value of water and encourage investment in more efficient industrial and agricultural water use. The reform certainly helped improve efficiency, but there was a heavy price to pay as the trade-off was equity – the proportion of rights belonging to the poorest farmers has fallen by over 40% since 1981, small producers have been marginalised, indigenous communities have lost their use rights to mining companies,ⁱⁱ and rivers in some villages have dried up or become unusable due to over-exploitation and pollution by mining industries.ⁱⁱⁱ

Some countries in Latin America, such as Bolivia, Peru and Ecuador, had planned to imitate the supposedly exemplary Chilean model promoted by neo-liberal economists. But these systems have proved to be exclusive, inefficient and contrary to the general interest. Over the last 30 years, indigenous groups and farmer movements in Andean countries have successfully opposed attempts to reform water legislation in order to defend their access to this resource.

So we should not see systematic recourse to the market in the name of 'modernisation' or creating a 'water economy' as a solution that is either effective or in the general interest. Water is a complex resource that can be shared in various ways (market-based and non-market based) that farmers can help co-exist.^{iv} It is essential that the public authorities regulate the allocation of water, as it is a common good that should be physically and economically accessible to everyone, without exception, and whose primary use should be in the common interest.

Defending and securing farmers' rights to water

Recognising rights to use and

access water

Large-scale land appropriations are partly fuelled by a desire to capture water flows. As available water becomes increasingly scarce, certain countries with limited water resources, such as Saudi Arabia, have decided to restrict agricultural production on their territory and invest in farming abroad. Africa only uses 2% of its water resources for agriculture, and has become a prime target for such investments: 45 million hectares of land on the continent have changed hands in transactions involving large-scale agricultural investment (World Bank, 2009). How many million cubic metres of water will be appropriated as well, and what effect will this have on local populations and the environment?

Denying farmers the right to access water not only deprives them of their means of subsistence, but also contributes to the economic and social destabilisation of certain areas, and may threaten the food sovereignty of the countries concerned. The water and land rights of these farmers, herders and fishermen urgently need to be secured by recognising local rights and incorporating them into national legislation.

Land grabbing, water grabbing in Peru ...

Land grabbing often goes hand in hand with the appropriation of water rights. The company *Maple Ethanol SRL* has not only purchased over 10,000 hectares of land in the Piura region of northern Peru for sugar cane production, but also obtained exclusive rights to water in the River Chira, to the detriment of other users, including producer organisations and small and medium-sized enterprises. *http://www.coordinationsud.org/Agricultures-familiales-et*

As with land, the recognition and allocation of water rights should be accompanied by other measures, such as technical and financial support for farmers, remunerative prices, and the recognition and strengthening of farmer organisations, water users associations, etc. These measures should be taken into account in decentralisation processes.

Strengthening international law

Basic human rights include the right to sufficient food and the right to water. The main legal basis for these rights is Article 11 of the International Covenant on Civil and Political Rights (ICCPR),^v which recognises every individual's right to an adequate standard of living. Several international legal conventions explicitly recognise the 'right to water',^{vi} but restrict this to personal and domestic use; the right to water for agriculture is enshrined in the right to sufficient food.^{vii} In 1999

the ICCPR adopted General Comment 12 on the right to adequate food, which entails guaranteed and sustainable access to water resources for agriculture. International law thus aims to ensure that people are not deprived of their means of subsistence, including access to water for agriculture. Therefore, international organisations, national governments and civil society must ensure that farmers benefit from equitable access to water and water management systems.

Investing intelligently in water for agriculture

For an alternative 'modernisation' of rain-fed and irrigated farming

National governments and international public cooperation agencies (bilateral, multilateral, decentralised) need to increase their support for programmes to improve access to water for family farming. This means investing in 'a different kind of agricultural modernisation' that takes account of expertise in collective and individual water management involving users in socially managed water towers for gravitational irrigation and the management of pools and wells in desert areas, etc. In addition to establishing bodies to manage water resources in villages and rural communities, existing water management practices need to be improved or adapted, and equitable and efficient forms of management promoted. Investments in South East Asia should focus on improving the productivity of existing irrigated areas.

Supporting the widespread dissemination of simple techniques

Concrete projects based on simple techniques:

Farming families in semi-arid areas of north eastern Brazil capture rainwater from their roofs and store it in tanks so that they can use it for domestic purposes and to irrigate their gardens. In northern Burkina Faso, farmers use donkeys or cattle to dig *zaï* (planting pits) in order to improve rainwater infiltration, restore highly degraded soils and significantly increase their cereal yields. In Madagascar, a network of artisans craftingvery simple drip irrigation systems out of local materials has been established, providing families with affordable means of irrigating gardens where they grow food for domestic consumption and for sale on the markets.

A key concern in every part of the world where rain-fed agriculture exists is improving agricultural practices, maintaining soil fertility, and enhancing its capacity to retain water in order to use water in the ecosystem more efficiently. This can be done by financing and promoting simple, inexpensive technologies that are already used to collect, distribute and store rainwater (small dams, individual tanks, micro-irrigation, etc.). Doubling the amount of irrigated land in sub-Saharan Africa could increase its contribution to global food supply by 5% to 11% between now and 2050.^{viii} However, more investment in infrastructures will be needed if irrigated areas are extended.

Adapting investment to local management capacities

Hydro-agricultural developments need to be undertaken on a scale that allows local people to manage them in an effective and sustainable manner. If these investments in small- and large-scale irrigation are to be sustainable, projects need to take account of traditional management methods and adapt to local practices – which means involving users in project design and implementation.

The impact of deregulating water in the Philippines:

The Angat reservoir is used to irrigate 30,000 ha of rice fields, generate electricity and provide 97% of the drinking water consumed by the population of Manila. In 1997-1998, following recommendations by the World Bank and the Asian Development Bank, the government decided to deregulate the water sector, and accordingly reconsidered traditionally allocated water rights and privatised the management of this reservoir. This had a devastating effect on local farmers - halving production in the space of 10 years and leaving them much poorer and unable to pay the fees to maintain the canals.

Putting skills before cement

Investment in water for agriculture should not focus solely on financing infrastructures. It should also take account of the training needs of the actors who use and manage water, especially farmers, and envisage support to strengthen water users' associations and 'modernise' or create new, multi-actor institutions to manage water resources. Farmers in developing countries should be able to appropriate this modernisation process, with support from competent technical services.

Desperate need for skills in Ethiopia: An evaluation of irrigation projects in the Oromia region in 2006 indicated that 40% of irrigated areas are under-used, 50% of developed land is under some form of irrigation, and that 15 areas (amounting to 2,112 ha) have been abandoned. Other studies on small-scale irrigation highlighted the technical services' lack of skills and resources, and found that the interaction between these services and water users is a major obstacle to establishing sustainable water management structures.

For concerted and democratic water management

Case studies from seven countries^{ix} show that farmers are actively contributing to the creation or adaptation of new water management institutions. Innovative models of sound and equitable management have recently been developed through processes of negotiation and consultation between users. These processes are inexpensive, and the benefits are shared between farmers and other water users (urban areas, businesses, consumers of drinking water).

Public policies to 'modernise' water management should be based on these constantly updated practices and institutions and this kind of joint management model, using previous experience to strengthen the capacities of traditional and newly established water management institutions set up by family farmers in developing countries (associations of irrigation users, herders and fishermen, groups of water users, etc.).^x These policies should create the conditions and spaces for consultation with other users in order to promote the equitable distribution, effective management and joint protection of the resource. Finally, they should ensure that farmers and civil society are involved in mechanisms to regulate and monitor the multiple uses of water. A successful example of joint water management in Ecuador: Farmer organisations in the Central Andes of Ecuador (which are predominantly Indian) have fought to exercise their right to use water to irrigate land acquired after the agrarian reform of the 1970s and 1980s. But the fragile balances achieved in water distribution are now under threat as actors with very diverse interests (family farms, businesses, local governments in rural areas, and the provincial capital city Riobamba, which has a population of 150,000) compete with each other in a very unequal battle for access to water. Since 2007, NGOs have supported the creation of a consultative mechanism that will enable these actors to negotiate mutually beneficial agreements regarding distribution and management of water, and pool their technical and financial resources in order to manage the resource collectively. The results have been promising, despite the political upheavals surrounding water (new state institutions, debates on a new law, etc.): a water catchment committee representing different users has been created, a financial instrument has been put in place for actions to raise awareness about managing and preserving water, the foundations have been laid for political agreements on water sharing between the city and irrigated farming, and a joint plan is being formulated to manage water resources at the level of the catchment basin.

 $^{\rm i}$ FAO, Water for food. Water for life. Global evaluation of agricultural water management. Rome, 2008.

- " UNDP, Human Development Report, 2006
- iii http://www.nytimes.com/2009/03/15/world/americas/15chile.html
- ^{iv} Ruf. T., 'Les contradictions de la gestion intégrée des ressources en eau dans l'agriculture irriguée méditerranéenne', *Cahiers Agricultures*, vol.16, n° 4, 2007 v ICCPR, <u>http://www2.ohchr.org/french/law/cescr.htm</u>

vi See the following link for further information: http://www2.ohchr.org/english/issues/water/iexpert/standards.htm

vii CESCR, General Comment 12. 1999, the right to adequate food:

http://www.unhchr.ch/tbs/doc.nsf/(symbol)/E.C.12.1999.5,+CESCR+General+comment+1 2En?OpenDocument

viii FAO, 2008.

^{Ix} Cambodia, Ethiopia, Colombia, Philippines, Mali, Ecuador and Nicaragua ^XPrey Nup in Cambodia, with Gret, Ucurqui in Ecuador with AVSF.

Coordination SUD has set up various working committees as part of its mission to support collective advocacy by its members. The Agriculture and Food Commission (C2A) brings together international solidarity NGOs that are engaged in activities to realise the right to food and increase support for smallholder farming in policies that have an impact on world food security: 4D, Artisans du Monde, AVSF, AITEC, CARI, CCFD–Terre Solidaire, CFSI, CIDR, CRID, GRET, IRAM, MFR, Oxfam France, Peuples Solidaires in association with ActionAid, Secours Catholique, Secours Islamique.

The Commission aims to coordinate the work undertaken by its member organisations, and facilitate consultation between them on their advocacy work with social actors and international policy-makers. Members of the Commission agree on the representations that are made in Coordination SUD's name in a range of arenas (Concord in Europe, FAO, WTO, UNCTAD), and share information on current international issues. The Commission is mandated by Coordination SUD to formulate the positions taken by the group at key institutional meetings on the subject of agriculture and food.

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