



January 2023.

Food, Data and Justice Dialogues

Synthesis of issues and processes so far

Introduction

Ensuring Justice in a future society is inextricably linked to understanding and governing the way data and Artificial Intelligence (AI) connect to development frameworks, policies and practices. What the future holds is linked to how the rule of law and people's organizations can check state overreach, dismantle Big Tech omnipotence, and deepen democracy from local to global levels.

The ongoing deployment of programs to transform food chains and the intensification of corporate mergers among Big Ag and Big Tech¹, shows us the urgency to act in defense of food sovereignty. Here is where agile, informed and concerted civil society thinking and action is urgently needed. Unless civil society actors across the spectrum come together now to evolve the principles for the digital, and its pathways for the economy, society and policy, digitally-driven corporate strategies will likely intensify the current crisis and worsen our collective futures.

Partnering with IT For Change, the JNC and the Long Food Project-

The Just Net Coalition (JNC) is a global network of civil society actors committed to an open, free, just and equitable Internet. Founded in 2014, the coalition engages on topics of the Internet and its governance, with the goal to promote democracy, human rights and social justice. Its founding principles and objectives are contained in the Delhi Declaration. IT for Change serves as the secretariat of JNC. The

¹ [Plate Tech-Tonics | ETC Group](#) - [Food Barons 2022 | ETC Group](#)

partnership with JNC is part of a greater effort to develop cross-cutting principles for digital and data governance, in key sectors such as labor, health, trade, etc.

In parallel IPES Food and ETC Group are engaged in a multi-year collaboration and exploration called 'The Long Food Project' which uses a 25-year scenario planning to understand the forces shaping global food systems. The project's initial report "A Long Food Movement" sketches out a likely 'agribusiness as usual' scenario in which big food, big tech and big finance collaborate to deploy bio-digital technologies to deepen their grip over food systems. The Long Food Movement report also imagines cross-movement collaborations that might affect meaningful course correction with a 25-year lever of change. The Long Food Project has identified that encouraging cross and intra movement dialogue about bio-digital technologies and their impact on food systems is a top priority.

Using the opportunity of the larger Just Net 2.0 dialogues and drawing on the insights and collaborative methodologies highlighted by the Long Food Project, ETC Group agreed to convene a global dialogue on Food, Data and Justice (FDJ Dialogue) to discuss key issues regarding digital agriculture, the threats to human rights and food sovereignty and how movements can organize to resist these threats. In its first phase this was conceived as a part of the broader JustNet 2.0 effort to address digital implications across many areas of civil society action and to produce inputs for policy issues documents. The connection with the Long Food project helps turn this originally discrete project into a longer initiative.

While the FDJ process to date has been in the mode of opening up multiple spaces for dialogue and exchange (at different regions and scales), we aim ultimately for a global meeting to bring together international movements and regional processes to debate and agree on a set of principles on how to assess digital technologies in food systems. In this sense, the spirit that guides the project is to connect, strengthen and cross-pollinate existing organically emerging initiatives between scales, regions and movements. We hope this dialogue as it emerges will strengthen the food movement's capacities to resist and formulate strategies in the new context.

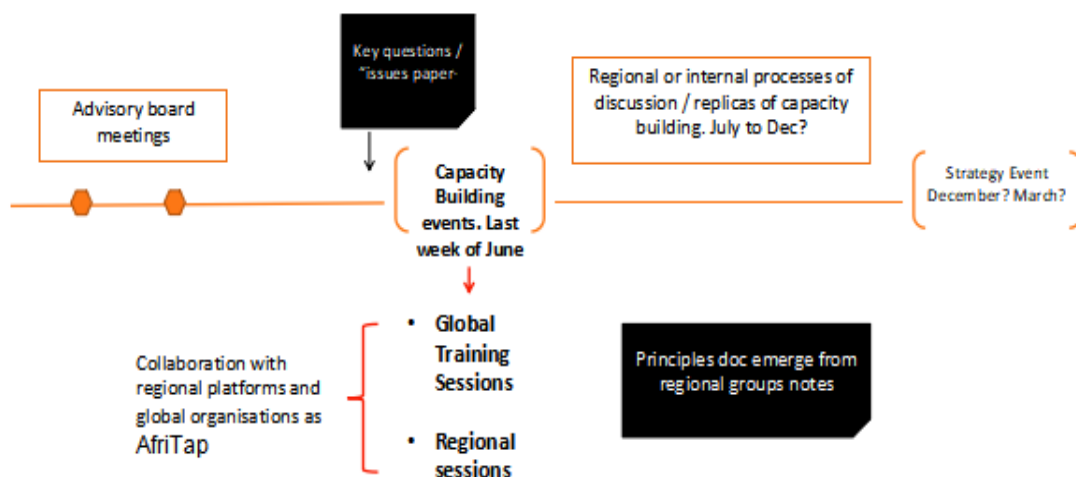
Key steps to constructing a global dialogue

In discussion with IT for Change and the Long Food Movement project, ETC pursued the following approach to create movement dialogue, knowledge sharing and systematization, on digital and bio-digital technologies in food and agriculture:

- Identify different regional and international civil society processes that are rapidly emerging in the food sovereignty movement to understand and respond to the impacts and implications of agrifood digitalization. Where necessary seed additional regional processes.
- Advisory group: invite key individuals that participate in movements, civil society processes and regional networks, that already are steering this debate and can bring to the table experience and situated perspective on how to assure the global debate will respond to the needs on the ground.

- Outreach and dialogues with different processes to engage in one collective objective towards articulating efforts and organizing a set of principles on how governance of digitalization of agriculture -in the frame on food sovereignty - should occur, or not.
- Produce materials to support the spread of tools for analysis and key concepts for movements and local organizations to generate their own educational processes and debates.
- Host a global event and articulate with global and local processes, hoping to kick off further collaboration and movement-building.

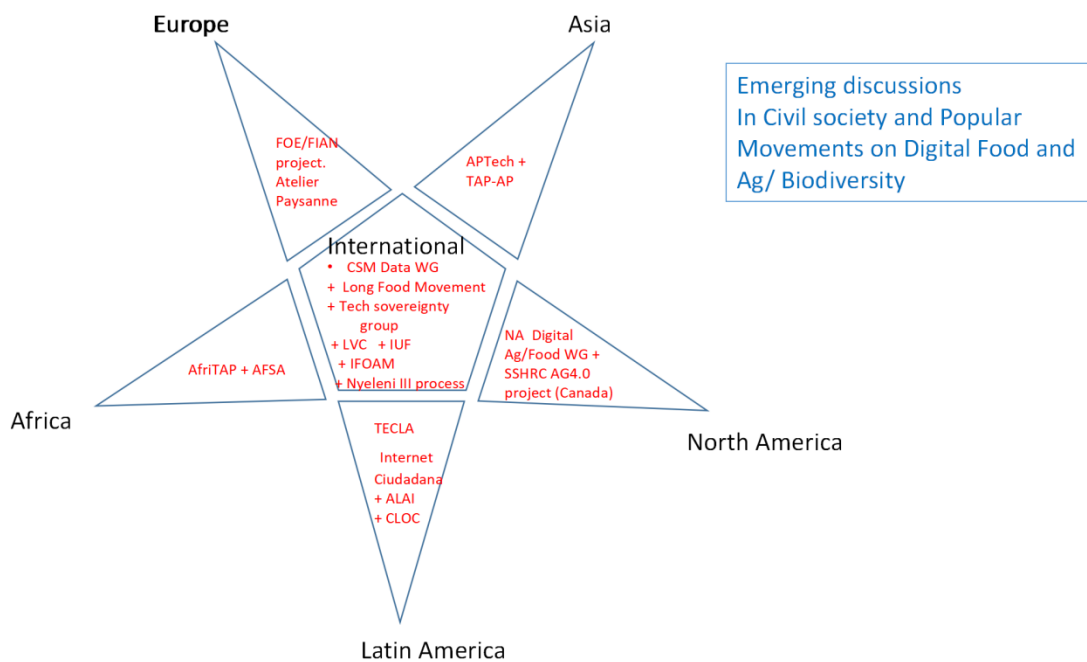
The visual timeline of this process shows how we imagined the unfolding of these dimensions through 2022 and into 2023, while moving from original collaboration with the Just Net Coalition into the context of the LFM 2023 project, with a continuous process-wise perspective.



The timing for putting in gear such a process was clearly very ripe. The diversity of civil society conversations on digitalization of food and agriculture that are emerging in parallel is quite extensive. That includes regional networks in Latin America, Africa and Asia, the North American and European working groups on digital food and agriculture, regional conversations within La Via Campesina (global peasant movement) and interest from regional and working groups within the IUF (International Union of Food, Catering and Hotel Workers) discussing the impacts on rural and food chain workers. There are also ongoing projects among academics/organizations in North America and in Europe, as well as standalone civil society research efforts trained on digitalization issues - including from international organizations such as FIAN and Friends of the Earth. Also, worth mentioning are the efforts being made to understand the gender and racial equity issues embedded in the roll-out of digital technology in food and agriculture. ETC found there was plenty of potential for synergies and for the joining and cross pollination of efforts. We also

noted the importance of broader food system initiatives such as the coalition working against the 2021 Food Systems Summit who adopted a focus on digitisation threats and the early steps towards a “Nyeleni III” process convening the global food sovereignty movement – in which there is also recognition of the need to understand these trends.

Such diversity and multidimensional movement activities can be visualized in the “star” of intersecting conversations (see below). Such processes will be described further later in this document.



Additionally we discovered It was a good moment to intersect with regulatory agendas within international fora such as FAO that will display the scope and framework on how this issue is defined. Relevant decisions are being drafted already – for example the Committee on World Food Security (CFS) is developing its work-plan on Data and Food Security and Nutrition and the Civil Society and Indigenous People’s Mechanism (CSIPM) of the CFS has therefore struck a Data Working Group that is acting as point of exchange and learning between food movement actors as well as inputting into the CFS work plan. The products of the dialogue may serve as a broad mandate to reinforce civil society in these scenarios.

In parallel the FAO is developing a ‘Digital Council for Food and Agriculture’ and the digitization of food and agriculture will emerge as an area of negotiation in the upcoming Summit for the Future and proposals for a digital compact. Also a focus of concern is the EU agenda on carbon markets which is being embedded in regional mapping/digitising of resources through platforms that promise to instruct the farmers on “carbon farming”, in exchange for surrendering all the datifiable

information about their production systems, deploying yet another set of arguments for the commodification of land, nature, knowledge, etc.

Other relevant governance processes noted by the advisory board to the Food Data and Justice dialogues include:

- FAO Agroecology platform must become informed and assist in making digitalization fit for agroecology ...not vice versa.
- At the UN level, it is important to make visible/understandable the synergies/connections of this agenda in the different spaces, like FAO, CBD and UNFCCC.
- World Summit on the Information Society Forum
- FAO e-Agriculture initiative which includes their 1000 digital villages initiative
- The FAO agenda on land consolidation
- Corporate agenda on capitalizing on plant genetic resources inventories (financing gene banks, extracting genetic data from these gene banks) which surfaces in governance discussions on genomic Digital Sequence Information (DSI) – e.g. at The Seed Treaty and the UN CBD.

Conclusion: The initiative to hold a dialogue to confront food sovereignty, data and digitalization issues, and justice is timely. There is an active commitment and enthusiasm from many constituents to make it happen and many nodes at which the dialogue is already bubbling up. The task is not to create a further separate process but to connect and cross-pollinate existing organically emerging initiatives between scales, regions and movements.

1) Advisory group and global teach-ins to set the scenario of the dialogues.

The FDJ advisory board came together for the first time in December 2021 with the aim of sharing a general diagnosis of how organizations, activists and academics from different geographies, involved in the food sovereignty movement were approaching and understanding the phenomena of the digitalization of food systems.

The original group included:

Martín Drago - FoE International; Sagari Ramdas - Food Sovereignty Alliance, Devlin Kuyek - GRAIN, Samir Doshi - Stanford University, Patti Naylor - NFU/LVC, Angelika Hilbeck Institute for Integrative Biology in the Department of Environmental Systems Science at ETH Zurich, Nicolas Décome, L'Atelier Paysane, Mute Schimpf - FoEE, Barbara Van Dyck - Coventry University, Philip Seufert - FIAN, Deepti Bharthur- It For Change, Martin Wolpold-Bosien - CSMIP, Andrea Ferrante - Schola Campesina, Matthew Canfield - Van Vollenhoven Institute, Shalmali Guttal - Focus on the Global South, Sally Burch - ALAI, Sue Longley - IUF, Elizabeth Bravo - TECLA, Tica Moreno - SOF, Kartini Samon - GRAIN, Attila Szocs - ECVV, Yodit Kebede - AfriTap. Later other colleagues drawn from regional groups also participated in some Advisory Board meetings.

Participants were asked to share about the processes they are involved in, the questions/themes arising from these discussions, and the lessons/needs to be considered in a global conversation. As an input for discussions to feed a collective orientation for the Food, Data and Justice Dialogues, the members were also asked to answer in writing a series of questions to produce a panoramic view of the issue. The [synthesis of these answers](#) was presented to the group for further discussion.

The core agreement that came out of the Advisory Group was that we should focus our efforts in this **first stage on a capacity building** process, on providing adequate information that allows to frame the discussion, identify and understand the key issues and the multidimensionality of the digital tsunami. We agreed we should have a 2-day event, starting with a 2.5/3-hour seminar and the day after at least two or three time-zone/geography focused sessions.

A **second moment in the FDJ process would give time for movements and regional groups to “bring the discussion home”**, organize specific events that may replicate part of the contents, and bring this information to internal strategy reflections. Later we hoped to come back to a following **third moment of strategic discussions**, that may be framed in confluence with other processes (eg. Nyeleni III). We would rely on this advisory group (with other invitees if adequate) to steer these conversations. The conclusion of the Advisory Group was that the FDJ process must focus on building alliances and useful analysis, aiming for a wide audience within movements and CSO, many of which may not be deeply informed on the issue.

This was written up as a key [concept of the FDJ dialogue strategy](#) and was synthesized to direct the following steps.

2) **Capacity building and preparing the terrain for strategic discussions**

The Food Data and Justice Dialogue then came to a kick-off milestone in June 2022 when a global teach-in session was organized to offer movements, activists and academics a framework to consider the digitalization of food systems - a key step to build common ground for analysis and strategic discussion. It was organized as a free and open teach-in, organized in two 45 min teach-ins with 15 min for Q&A. Both sessions of the webinar were presented in two different schedules: June 29 for North America, Latin America, and Europe (in English, Spanish and Portuguese) and June 30 for Africa, Europe, and Asia (in English, Portuguese and French).

This webinar served as an introductory session to provide key elements for understanding the phenomena of the digitalisation of food systems from seed to stomach (also known as the 4.0 revolution in food and agriculture).

Session 1: Power and technology: the digital food chain | By ETC Group (Jim Thomas and Neth Daño)

The session went deep into asking questions such as What is “the digital food chain”? what networks of power are behind it?; what are the

technologies involved in the "digitalisation" of each link of the agrifood chain? and what is the role of artificial intelligence and data mining?. It explored the connections between big corporate tech and food players and digital platforms, corporate concentration in these sectors, and tried to unpack the role of states when it comes to deploying technologies and enabling monopolistic practices. It introduced the concept and political implications of bio-digital convergence. [Link to the presentation](#)

Session 2: Food, data, and capitalism: a new business model | By IT For Change (Parminder Jeet Singh)

The session explored key elements to better understand the new digital economy and surveillance capitalism and how it is being applied to food. It attempted to answer the question of what is data in this context, and particularly, data for food systems (also increasingly known as "surveillance agriculture"). Also analyzed the connection to green capitalism and the financialization of nature. [Link to the presentation](#)

Over 600 people registered for the webinars and both were [recorded in three languages](#) as a tool for knowledge sharing and replicas as a subsequent moment of the dialogues. Also as a result of the teach-ins there was a systematization of an educational booklet entitled "[The digital agri-food value chain](#)" available in Spanish and English.

Through the webinars and subsequent communications with participants, it was offered the possibility to organize specific capacity building events with movements or regional/local focused groups of organizations as a continuity.

3) Simultaneous and intertwined debates on the digitization of food systems

Many regional initiatives have come together over the last year to discuss and assess the impacts and potential outcomes of the deployment of digital technologies over food systems and these have been incorporated into the Food, Data and justice dialogues where possible to enhance cross-learning. These have identified a diversity of aspects of digitalisation of food systems and different priorities civil society establishes when critically assessing developments:

North America: Canada and the United States.

The **North American Digital Agriculture Working Group** has come together as a result of the efforts invested by a group of North American non-governmental organizations. These groups established a North American Digital Agrifood Working Group (NA-DAWG) in conversation with other NGOs and social movements (including farmer groups, farmworker unions, environmental, indigenous and sustainable agriculture networks) to put together an initial 'mapping' exercise and the identification of the issues that are key for civil society understanding and action towards the governance of digitalization processes among the agrifood chain.

The participants from the first wide invitation included, Erik Nicholson -Pandion Strategies (formerly with UFW), Samuel Oslund and Severine von Tscharner Fleming - Farmhack, Dana Perls and Jason Davidson- Friends of the Earth, Kristen Strader and Neshani Jani - HEAL, Sophia Murphy and Sharon Treat - IATP, Darrin Qualman - NFU Canada, Ricardo Salvador - UCS, Ahna Kruzic - PAN, Adae Briones - FDNI Director of Native Agriculture and Food Systems, Eric Deeble -NSAC, Gail Myers - Farms to Grow, Lucy Bernholz and Samir Doshi - Stanford Digital Civil Society Lab, Devlin Kuyek - GRAIN, Marie-Hélène Bacon - CREPPA, Louise Vandelac - Université du Québec à Montréal, and Kristin Schafer from PANA.

Besides a series of discussion meetings, including open 'brown bag' knowledge sharing webinars, NADAWG struck a steering group that has met on a regular basis. (The steering group included individuals from ETC Group, FarmHack, Institute for Agriculture and Trade Policy, Pesticide Action Network North America, Pandion Strategy and the Stanford Digital Civil Society Lab). The steering group commissioned articles to be written by NADAWG members, a long form journalistic article (currently being pitched to national outlets) and began to create a standalone NADAWG website. As part of this process there was also a two session seminar for members of the group to share initial reflections that would later become part of the articles 1) On Data and Food Politics, and 2) On the false promises of digital agriculture.

The [Brown bag sessions](#) included Samir Doshi - "Race and Technology", Erik Nicholson - "On the ground: digital tech, farmers and growers" and Samuel Oslund - "Technological sovereignty".

The main issues that have come forward as priorities from NA-DAWG activities were:

- The major changes happening on the ground are as a result of the pressure over mid and big growers to incorporate automation and digital technologies, its economic impact. This transforms the productive landscape (including the displacement of smaller growers and those financially unable to accommodate the technological shift). Big and medium growers don't understand enough how to critically approach these technologies or the potential threat of dependency to data and platform based technology. They feel they have no choice but to adopt digital innovations or risk being sidelined.
- The debate of the regulatory framework regarding data use for agriculture is underway and being shaped in narrative terms by movements such as "the right to repair" that's fighting John Deere restrictive use of intelligent and automated machinery.
- The racist background integrated into the push for automation in food production, as a result of the anti-migrant mindset that has been politically reinforced in the last decade. As racial justice organizers understand systemic bias in AI systems there is an opportunity to bridge to exposing racial biases in digital agrifood.
- There is an urgent need to unpack the narrative that is being imposed as a promise to "solve problems we did not know we had" or to fix climate change,

and revert the common sense that has been built around the essential benefits of these technologies.

- Groups emphasized the importance of farmer-based and farm-worker based innovation as a core part of the discussion and the possibility of developing a sovereign perspective over technology that includes rural youth. Early discussions on the concept of “technology sovereignty” or “technology autonomy” in food systems have begun.
- There is an urgent need to discuss political strategies to resist the digital tsunami. Many important sectors such as workers unions and even growers have little or no information to deeply understand the implications of accepting the digitalisation and automation of food systems, much less a debate about concrete actions. But everyone is aware of how the world of food production is changing all around.

Africa

The **Alliance for Food Sovereignty in Africa (AFSA)** and the **African Technology Assessment Platform (Afri-Tap)**, have undertaken the task of kicking off the analysis and discussion of the implications of the digitalization of agriculture for the African continent. There are ongoing efforts to convene a dedicated African working group on digital food and agriculture. There have also been a series of meetings to unpack the narrative with which the deployment of digitalization is being presented to African governments and society from the perspective of multilateral fora (particularly FAO), and private corporate foundations such as the Gates Foundation.

The first meeting of the African Working Group on Digital Agriculture included: Issouf Sanou - Fédération nationale des organisations paysannes (FENOP), Mamadou Goïta - IRPAD, Ali Tapsoba Terre à vie Anne Maina Biodiversity and Biosafety Association of Kenya (BIBA) – Kenya, Frances Davies - Zambia Alliance for Agroecology and Biodiversity, Andrew Adem - Eastern and Southern Africa Small Scale Farmers Forum- Uganda, Dr. Matthew Canfield - Van Vollenhoven Institute for Law, Governance and Society Leiden Law School; Olugbenga Adeoluwa - Network of Organic Agriculture Researchers in Africa, Opeyemi Elujulo - Youth for the Environment Ibadan, and Japkor Philip - Corporate Accountability and Public Participation for Africa. The initial group continues to outreach for farmer organizations through the continent to kick start a process of knowledge sharing in 2023.

Also the african organizations AFSA, The African Centre for Biodiversity and HOMEAF in collaboration with ETC Group have conducted a series of workshops focused on understanding and unpacking the narrative that promotes the digitalization of agriculture and food. Almost 70 journalists, farmer leaders and activists registered for this workshop.

Some of the main issues identified by African participants include:

- Most peasant and small scale farmer organizations in Africa express a concern surrounding the lack of information and deep understanding of what digital agriculture means and what may be the potential conflicts for the region, identifying an urgent need to socialize information and critical analysis.
- Digital agriculture systems as developed in North America or for industrial agricultural use in Africa are biased towards larger scale and monoculture growing systems, not complex, mixed agroecological small grower landscapes. There is a strong risk that the use of digital tools will push African agriculture to be 'simplified' (monoculture) to better work with digital tools, undermining agroecological approaches.
- In countries like Kenya, although still not massively, the small scale focused digital ecosystem is already being deployed, with platforms such as Digifarm that provides small farmers in Kenya with chatbot services, sells them inputs and crop insurance, offers them loans and buys and sells their produce, all via Safaricom's cell phone service and its national digital money platform. Startup companies in Nigeria, Kenya and other parts of Africa have integrated precision farming measures which analyze soil data like temperature nutrients, vegetative health to help farmers apply the right fertilizer to optimally irrigate farms. A start up in Kenya called Ujuzi Kilimo, uses big data and analytic capabilities to transform farmers into knowledge based communities with the goal of improving productivity through precision insights. Beyond precision farming, financial solutions designed for farmers are blossoming. Farm Drive, a Kenyan startup connects unbanked underserved small holder farmers to credit while helping financial institutions cost effectively increase their loan portfolios.
- Small scale food retail on the continent is also under siege by digital platforms. Corporate take-over of African food markets is happening through players like Twiga that plan to expand across Africa to supply Auchan and other supermarkets through the direct delivery from farmers, using transactions organized through cell phones that run on Microsoft's digital platform and cloud services. Although they claimed to eliminate the middleman and benefit producers and small vendors, it is actually eliminating every distribution network outside supermarkets.
- Major corporations are advancing digitalization of African Agriculture by launching payment systems, credit platforms and digital insurance. This is intended to serve subsistence farmers who have to compete against local startups particularly on cost of service in a highly fragmented business with no easy path to scale, owing to illiteracy, language. Mobile payments like Mpesa, Ecocash all those without bank accounts to transact digitally. In Cote d'Ivoire Kamtar has established logistics operations and MaxAB in Egypt uses data analytics to connect fleets of drivers to customers. Online Market-places like Khula and Yebofresh in South Africa, direct wholesalers like ifarm in Kenya or direct farm to consumer services like Fresh in a Box in Zimbabwe are competing with physical retail stores. This is a terrible phenomenon for local small holder farmers in Africa; most of these technologies are being promoted to farmers who have limited understanding of how technology actually works.
- There is a concern that despite the digital divide, FAO released a report called "Status of digital agriculture in 47 sub-Saharan African countries", reviewing the

ITU capacity of 47 countries and the status of digital agriculture, what requires a deep dive to explore the assumptions that underpin big tech approaches to digital agriculture in the region. The accelerating growth of internet in Africa has facilitated the emergence of digital technologies in Africa's food systems, a recent report² suggests that 33 million registered users in 2018, 13% of smallholder farmers in sub Saharan Africa and this figure is forecasted to rise to 200 million registered users in the next few years.

Europe

A recently formed **European Group discussing digital food and agriculture**, has brought together some key environmental NGOs and food sovereignty movements, including La Via Campesina's European coordination and scholars working on the issue.

The European group initially called upon a group that included:

Pat Thomas and Lawrence Woodward - Beyond GM (UK), Thomas Borrel - L'Atelier Paysan (France), Nicolas Decôme, l'Atelier Paysan - Technologos (France), Attila Szocs - ECORURALIS, ECVC (Romania), Olcay Bingol Policy Officer ECVC, Mute Schimpf - FOEE (The Netherlands), Andrea Ferrante - Schola Campesina (Italy), Angelika Hilbeck - Institute for Integrative Biology in the Department of Environmental Systems Science at ETH Zurich, Philip Seufert- FIAN, Barbara Van Dyck Centre of Agriculture and Resilience - Coventry University (UK Belgium), Lili Balogh - Hungarian Agroecology Network/European Agroecology Network - Soil Association (UK), Martin Sommer - IFOAM , Gustavo Duch and Cecilia Dopazo - Revista Soberania Alimentaria (Spain), Christoph Elliot - BASIC (France), Marie-Hélène Bacon - CREPPA, Louise Vandelac - Université du Québec à Montréal, Frida Kieninger FOEE. Also scholars at the Sheffield University and Reading university as well as colleagues from IPES Food.

Although many organizations in Europe work in close contact with the global south and in North America, allies have found it important to understand how digitalization will also transform the landscape of food systems in Europe itself, and the links between this transformation and global trends.

For example, the group identified that Europe is in the avant garde of regulatory initiatives regarding artificial intelligence and digital technologies, particularly surrounding the issues of privacy and data, but there's still very little work on the specifics of data in agriculture or restraining data monopolies in food and Agriculture.

Another issue that came forward as a priority was the need of building the critique to carbon farming policies as a mechanism for digital nudging of farmers and the imposition of false solutions to climate change. ECVC has launched a report on this.

² Tsan Michael et al. "The Digitalization of African Agriculture Report" 2018-2019 CTA and Dolberg Advisors, 2021

Similar to North America, farmer-led innovation and the perspective of protecting technological sovereignty is key to the European debate, where many groups have years of experience and reflections on the issue.

Finally, a general concern that arose for the European group was what are the perspectives and contradictions of the organic sector adopting digital tools and platforms. Organic bodies in the EU region are actively engaged in vociferous debates on the appropriateness of digital farming. Energy and resource costs of using big data for agriculture emerge as one focus of concern.

The group also focused on organizing [“brown bag”](#) knowledge sharing lessons – including a dedicated session on Carbon Farming led by European Coordination of La Via Campesina, and in the context of the FDJ dialogue, the European group conducted a [shared session with the North American Group](#) to find common ground to understand the digital tsunami on the global north.

Asia Pacific

Within the first steps of the FDJ Dialogues, ETC through the AP-Tech project conducted in the last months of 2021 three online conversations that brought together key people from farmer groups, workers organizations, activists, and scholars to open a dialogue on the impacts of digitalization across several sectors. These have been summarized to visualize the key aspects of the analysis on the issues of Forestry and extractive industries; Agriculture and fisheries; Industries and labor.

Also in the context of the FDJ Dialogues an Asian group of organizations is promoting a process to hold a webinar every 3-4 months on topics relevant to digitalisation in food and agriculture in Asia Pacific with inputs, support and suggestions from the FDJ Advisory Board members of Asia (Shruti Patidar - IUF, Shalmali Guttal - Focus on the GLObal South, Sagari Ramdas - Food Sovereignty Alliance?). This [first FDJ Asian event](#) had the participation of 28 attendees from different countries, and the resource persons were Neth Daño (ETC Group), Parminder Jeet Singh (IT for Change) and Kavya Chowdhry (ETC Group).

The aim is to hold a series of conversations to facilitate critical understanding of the digitalisation of food and agriculture in the Asia-Pacific region, among CSOs and other relevant entities in Asia-Pacific. Participants have asked questions around the application of precautionary approaches to the regulation of these digital technologies, operability of digital technologies in food and agriculture, if digital twins offer more advantages than the conventional IoT system and so on. In earlier conversation such as during the forums on climate financialization through agriculture digitalisation held in Manila in October and at the feminist convening on digital rights held in Chiang Mai in November, CSO colleagues articulated the need to discuss more deeply the dynamics and implications of nudging on farmers' rights, feasibility of community-controlled digital agriculture platforms, etc.

The focus still is to share useful information and knowledge on how digitisation is being carried out and how different it is from previous technological waves in agriculture, and impacting farmers, and what the impacts might be in Asia Pacific countries. There is also a lot of interest in exploring opportunities and possibilities for farmers and rural communities to genuinely benefit from and exercise control over digitalisation.

Some of the main issues identified:

- The role of the State: particularly in India where the government has signed MouS with Microsoft, Amazon, ESRI India Technologies among others. The State facilitates the corporate takeover of the value chain at every single step, integrating it into global supply chains, including major projects to integrate small scale farmers in the digital ecosystem. The State is concerned about “digital traceability” since whatever remains of a regulated market system is being bypassed through e-trade. The Indian government is pushing for drone manufacturing, investments in semiconductors, and facilitating setting up of data centers.
- The World Bank has heavily financed digitalizing agriculture in India where a farmer’s identity is reduced to a commodity and data.
- Digital land registry rather than solve land conflicts in the region, has become a tool that contains all the information on land and natural resources which therefore attracts investments and eases companies’ permit application process (e.g. Indonesia).
- CSOs and NGOs are involved in the creation of a framework for Digital Ecosystem of Agriculture proposing ways on how the government should respond. There are also agroecology groups working on engaging on digital frameworks to have more knowledge on data management from their end. Whether public ownership of digital infrastructure and democratizing data (data as a right, as a collective resource, as a common good) is a possible way forward is an ongoing conversation with many constituents from the digital equity end, that still lacks the stronger critical technology approach from the food sovereignty movement.
- China is undergoing the most radical transformation of its agrifood system towards the digital food chain. Also, it holds a geopolitical key role as the world’s main producer of cheap microchips and technological commodities that are necessary for the development of any technological package.
- It is also important to keep track of resource extraction necessary for digitisation across sectors.
- Questions around carbon farming, land acquisition and application of digital technologies in aquaculture should also be investigated.

Latin America

The **Latin American Technology Assessment Platform (TECLA)** has, for almost 10 years, united several organizations and individuals in Latin America to inform and

debate about new technologies. TECLA has taken a deep dive into the assessment of what digital technologies may represent for the future of food sovereignty in the region. Different from other debates, TECLA has gone further in discussing more philosophical aspects of communications and digital technologies, and discusses mainly how the introduction of digital platforms will transform the concept of autonomy in food production, subordinating rural livelihoods and food systems to the productive and economic decisions made through algorithms. TECLA has also prioritized the cultural and gender perspectives as a contribution to the global analysis of the potential impacts of Ag4.0 technologies.

In this context TECLA has picked up the FDJ dialogues by organizing a [regional virtual conversation](#) to identify the focus of analysis that interest the organizations in the region, using an input produced by ETC to reflect on collective strategies called [“Challenges in the face of digitalization policies for food systems in Latin America”](#) (available in Spanish). Some of the participants that conducted this call were Elizabeth Bravo -RALLT and Tica Moreno SOF / Marcha MUndial de las Mujeres, Brazil.

TECLA also had an in-person meeting in November 2022 in Chile where ETC presented its research on [digital platforms in the South Cone of Latin America](#) as a kick-start for the discussion of the impacts of corporate led digitalisation over food systems in the region. The organization that participated in this workshop were: ANAMURI, CLOC - LVC, RAPAL, HBF, Colectivo por la Autonomía (México) and as members of the TECLA network, ATALC - Amigos de la Tierra de América Latina y el Caribe, GRAIN, Marcha Mundial de las Mujeres, RALLT – Red por América Latina Libre de Transgénicos, UCCSNAL, Unión de Científicos Comprometidos con la Sociedad y la Naturaleza en América Latina, Casifop / ANAA - Centro de Análisis Social, Información y Formación Popular, Asamblea Nacional de Afectados Ambientales (México), Red de Coordinación en Biodiversidad (Costa Rica), REDES- Amigos de la Tierra (Uruguay), UCCS - Unión de Científicos Comprometidos con la Sociedad (México).

In parallel, the regional section of LVC, the **Latin American rural organizations coordination (CLOC)** has also taken a step into understanding digitalization, focusing on the debate that confronts corporate led technology vs farmer led technology and technology sovereignty.

Some of the main issues identified:

- Digitalization is arriving to the already industrialized areas of Latin America, where export crops are grown in private schemes. These export crops represent for the majority of rural communities exploitation of their resources, pollution of the soils, land grabs
- Tech / digital corporations are promoting digital tools (specially the agro-platforms) to incorporate small scale Latin American farmers to the digital wave. Organizations consider this a way to weaken their autonomy over their territories
- Tools such as block-chain are being used to impose a “digital legality” over historical and customary land rights

- Digitalization tools such as drones are associated with surveillance
- Even worst, drones and robots are being used by narcotics production, have entered the war on drugs
- As in Africa, a main feature of digitalization in the Latin American farms are cellphones and fintech schemes, as in this region most of the economy is informal and remittances are the biggest source of income in several countries.

Some conclusions and reflections at this stage of the FDJ Dialogue.

- It is hard to find a common language between the world of digital policy and food/agriculture - agree on the need for 'translation' and building bridges also as a core objective for this process.
- Identification of the key role of the state in making possible the deployment of digitization. Clear references to the way public resources and institutions are paving the way for the adoption of digital technologies in food systems, in the North and in the Global South.
- Also, mentions of the key role of the sciences pushing towards a digital path – under the headline of making agriculture greener. Government investments in digital agriculture / business investments in agroecology backed by the State in the name of 'shifting to sustainable agriculture' advance corporate control over the supply chains of food and agriculture.
- General concern about the unpreparedness of specific mainstream sectors in food systems to engage in the debate either in push back/denial or embracing it and 'make the best of it'.
- There's a shift from gene-tech debate to digitalization - same tracks/same companies. Also the bio-digital frame is important to keep in view. As in other moments of imposition of capital led technologies, there's a challenge to understand the huge gap between the promises of the digital model and the reality.
- Lots of learnings from other sectors - especially movements in healthcare sectors where data/privacy protection etc. have been issues for far longer, and from worker's struggles in the context of platform economy arise.
- There is also an interrogation whether there are experiences of re-appropriating digital technologies for agroecology/peasant agriculture. How can they be identified and delineated from the corporate-driven tools? Is there The opportunities, but also present limitations, of non-corporate controlled technology (scant investment being one of the serious limitations).
- There is a huge demand for the conversation to evolve from analysis to strategy and action. The deployment of digital technologies in food systems is running

wide and fast and the need for stepping up to the challenge is becoming more and more evident to food movements.

- The question of “is there good digitalisation for agrifood?” recurs again and again in different contexts. The recurrent responses to this are movement interest in articulating agroecological farmer-led innovation (i.e. looking to ‘farmhack’ movements and principles of technological sovereignty or autonomy) and also pursuing deeper analysis of the politics of technological artifacts – especially in food economies.