AUTONOMY IN THE FACE OF AGTECH

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RESOURCES

Today, there is growing recognition of the significance of food systems. Recent studies show that agriculture, and related land use changes, are one of the largest contributors to climate change. In response, corporations and philanthrocapitalists are now investing billions of dollars in initiatives they claim will put us on the path toward a more sustainable future. But those initiatives do not focus on genuine moves away from fossil-fuel-dependent agriculture or improvements in governance (how power and decision-making are distributed). Instead they prioritise the development and implementation of new and potentially highly profitable industrial agricultural technologies. However, these technologies and the corporate governance that comes with them pose very significant risks for food sovereignty, agroecology, and farmers' autonomy.

Farmers worldwide have created tools and systems (e.g. plows, intercropping methods, biofertilisers) to address their challenges and needs, for as long as agriculture has existed. In fact, agricultural communities have always been involved in technological processes, as they've found new ways to relate to land and to each other. However, the concept of "agtech" is relatively new.

Essentially, agtech is a newly developing industry that combines several sectors — agribusiness, biotechnology, digital/software technology, and financial technology. We typically see agtech advertised in the form of "high-tech" modern farming implements, practices, and platforms — from drone farming to robot harvesters, to agri-e-commerce sites, to gene-edited crops. **But more importantly, agtech is propelled forward on the back of a powerful vision of the future — one in which corporations have even more control over our food systems.**

This vision is designed to be attractive to governments and institutions – in part, because it helps them to sidestep difficult policy decisions about fossil fuel use. It is a narrative that is being used to facilitate the flow of billions of dollars of investment into corporate-owned technologies that further entrench and extend the control of powerful actors in industrial agriculture.

Agtech supporters also claim that their technologies are the key to feeding the world in the face of a rising world population, increasing input and energy costs, soil and water degradation, and climate change, all while ensuring economic growth. But the trajectory of industrial agriculture over the past few decades shows that these are false promises. Thirty years ago, the term "genetically modified organism" (GMO) was coined to make the engineering of genetic material sound as palatable to the public as possible. In 1994, the first GMOs were introduced with the promise that they would end world hunger, lower the price of many foods, and reduce the use of pesticides. The reality has proved to be quite different: the industry has managed to produce only a small variety of GM plants, which are deeply tied to industrial monocultures.[1] Along the way, this "trail-blazing" technology has left a trail of destruction — dying soils, the use of increasingly toxic pesticides and herbicides (e.g. dicamba), unprecedented loss of biodiversity, spiraling debt cycles, and a rise in farmer suicides.

The novelty and attractiveness of the industry's current offers hides a simple truth: it is nothing more than a rebranding of the same exploitative economic and political systems that now threaten our collective survival. Nevertheless, that rebranding has been incredibly effective at capturing the imagination of governments, investors, and people around the world, willing to believe that it represents "the future of agriculture".

Today, new technologies are being conceived, designed, and implemented rapidly, without space to consider the implications and consequences for farmers. As a result, the agricultural landscape is changing rapidly, and farmers face growing threats to their rights and lives. It's therefore becoming increasingly vital to examine and critique this technological push. As it is, farming communities are often forced to decide whether or not to adopt tools that were created far from their fields and without their input.

Most often, the expensive technologies we see taking center stage in

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1   Friends of the Earth Europe. (2022). "Fast-track to failure Will new GMOs reduce pesticide use?... NO!".

formal food system dialogues serve the interests of the corporations who created them and disenfranchise the farmers they claim to support. Our work as civil society can focus on finding ways to counter and challenge these corporate narratives — to reclaim and reassert our voices, perspectives, and values through our own stories.

A NOTE ON THE USE OF "FARMERS"

There is great diversity among those who live and work in close relationship with land — from small-scale farmers to pastoralists, to hunter/gatherers, to fisherfolk. Food sovereignty movement members around the world embrace and use a wide variety of language to refer to the communities that produce our food. The term "peasant" has been deliberately reclaimed by La Vía Campesina as part of their political fight to recognise peasants as subjects of rights, through the framework of the UN Declaration on the Rights of Peasants and other People Working in Rural Areas (UNDROP).The authors of this toolkit, alongside most of our movement partners, prefer terms that uphold and uplift difference — selectively using "small-scale farmers", "peasants", and "Indigenous communities" where applicable.

However, narratives that try to capture our world's beautiful complexities aren't easily transmissible. Simplicity is paramount to create compelling messaging that can challenge the status quo. As such, we have used the term "farmer" throughout this toolkit. It is, of course, a broad term that has very different meanings in different contexts. We have sacrificed some of that nuance — not because we don't believe it's important, but because we want to ensure our messages reach our audiences.

HOW TO USE THESE TOOLS

A Growing Culture and ETC Group created this set of tools to synthesise the insights of social movements and civil society communicators and offer ways to respond quickly and effectively to corporate agtech narratives. Because there are so many new technologies put forward every year and given that each can take time and in-depth knowledge to understand, we propose an intervention method that focuses less on the technical details of each of these products and more on the influential stories and narratives being used to sell them. We present strategies for identifying how popular narratives around technologies work, their impact and implications, what gives them power, and how we can take it back.

These tools are the product of a series of narrative workshops held between April and July 2023, featuring members of La Vía Campesina and the Alliance for Food Sovereignty in Africa. We have done our best to condense the incredible analysis of workshop participants and put forward opportunities to leverage that analysis for our communication goals.

01
NARRATIVE POWER

WHAT IS NARRATIVE?

Agtech sells its vision of the future through stories. While evidence would suggest that agtech solutions are disenfranchising agricultural communities around the world, millions are being led to believe that these technologies will be our collective saviour. To contest that belief, we need to create and share more compelling stories that can convince people that another world is possible and worth fighting for. First, we need to establish what we mean by *stories* and *narratives*.

STORIES

We are constantly surrounded by information. We are always relating to our environment — to other living beings and living systems — and trying to make sense of the world. We tell stories to process all the information we take in daily. These stories tend to be about characters and situations. They are information systems, weaving together the *who*, *what*, *where*, *when*, *how*, and *why* of things happening around us into a form that can be easily transmitted to others.

For example, the following headline is a story about Jeff Bezos committing billions of dollars to confront the issue of climate change. It involves a specific time, place, and a set of characters and circumstances.

The New York Times

Jeff Bezos Commits $10 Billion to Address Climate Change

NARRATIVES/FRAMES

With the rise of different media forms, especially digital media, we are fed more stories than we'll ever be able to digest. The key is finding shared stories that connect us, give us a collective sense of meaning and purpose, align our understandings, and work towards a shared vision. This is where narrative comes in. The narrative is not just about things happening to characters in a given time and place — it defines the frame through which we view stories.

An easy way to think about *framing* is through photography. When taking a photo, we look through a viewfinder and determine what we want in the image. We choose who/what gets included and who/what gets left out. We choose who/what is in focus and who/what is out of focus. We also choose the moment to take the photo — at that moment, subjects could have different gestures, expressions, or interactions, leading to vastly different interpretations by the viewer. In other words, the frame is the context that puts other stories into perspective. It creates a viewpoint that determines which stories to pay attention to, what to believe and what to disregard, what to challenge and what to uplift.

Jeff Bezos' climate pledge is a story rooted in a specific context (who/what/when/where/why). However, we can imagine some narrative frames that can put a story like this into perspective and offer a viewpoint that determines how we feel about the story.

Some potential narratives include:

Narrative 01:
Billionaires like Jeff Bezos have the resources and knowledge needed to solve the climate crisis.

Narrative 02:
Billionaires like Jeff Bezos are the main cause of the climate crisis.

Whether you are more convinced by Narrative 01 or Narrative 02 has profound implications for how you might receive the story about Bezos. If you believe Narrative 01, you're more likely to feel hopeful at the headline around his US$10 billion commitment. If you believe Narrative 02, you're more likely to feel frustrated and would be more swayed by a headline like this:

Bloomberg

How the World's Richest People Are Driving Global Warming

Whoever controls the frame holds an immense amount of power. The frames that prop up systems of oppression (e.g. colonialism, capitalism, imperialism, white supremacy, and patriarchy) have withstood for centuries, if not longer, because they have been reinforced and upheld by those with a vested interest in maintaining unjust power structures.

CHANGING THE NARRATIVE

To change how people look at the world and to catalyse action, we have to change the narrative. We have to offer people a new frame, viewpoint, and way of looking at things. Our new frame must hold meaning for people — allowing them to make more sense of the world than they can through the dominant frame. Our success in narrative change hinges on our ability to clearly understand the dominant (corporate/institutional) frame and the logic that makes it compelling. Once we have that clarity, the goal becomes to reframe and create new narratives — figuring out how to flip the logic of the dominant narrative on its head. The challenge is doing that without falling into the trap of reinforcing the values and beliefs of the dominant narrative. Let's take an example:

Frame:
A billionaire is the result of hard work.

Reframe:
A billionaire is the result of the exploitation of hard-workers.

ASSUMPTIONS

Narrative frames are powerful because they determine the viewpoint through which we look at stories, which is how we make meaning of the world. But the frame only works if it connects to ideas that already exist within our minds. Say an oil company is trying to get people excited about a new offshore well. They are unlikely to convince someone that this is a good thing if that person believes that the climate crisis is real and is primarily caused by the extraction and burning of fossil fuels. However, they might convince someone skeptical about climate change that the project's economic benefits outweigh the environmental costs.

When we talk about *the things you need to believe to accept a story*, we are talking about assumptions. Every story is rooted in assumptions or *things you accept to be true without question*. Sometimes assumptions are tied to evidence — to information we've seen or heard about whether or not something is real or possible. Other times, they're not.

Some popular, problematic assumptions include:

1. Policies that are good for big corporations and wealthy individuals are good for everyone. (A popular example is "trickle-down economics".)
2. Government regulations on big businesses hurt everyone.
3. Poor countries are struggling because they are not "developed". They don't have the knowledge and expertise to industrialise and create the infrastructure needed to grow.
4. People are poor because they are lazy and don't want to work.

Assumptions can be about information, but they can also be about values and beliefs. In other words, they are not just about what's realistic or possible but also what is desirable — what is in line with our understanding of the world we want to live in.

Many assumptions are common to agtech narratives, but one particularly prevalent and powerful assumption stands out:

If we produced enough food, there would be no hunger.

Without this assumption, none of the industry narratives around agtech hold weight. The only reason corporations, governments, and institutions can continue to claim that technological innovation is the solution to hunger is that they see hunger not as a structural problem but as a technical problem — a simple problem of yield. This assumption has been at the heart of the Green Revolution since its inception. It's rooted in the myth that population growth is outpacing yield and that people will starve without a way to increase food production dramatically.

Today, industry narratives leverage the climate crisis to further underline this problem. The fact that extreme climatic events can compromise entire harvests is used to emphasise the urgency of finding new ways to ramp up food production. There's an implicit suggestion in industry narratives that, *even if* hunger did have a political dimension, the urgent threat of climate change makes it unrealistic to pursue a political solution. This is ultimately rooted in an additional assumption: private corporations are more efficient at creating social change than governments.

EVIDENCE

The assumption that hunger is caused by low food production is false. We already produce enough food to feed every human being on the planet.[1] More food is produced per capita today than at any other time in history — enough to provide for over 10 billion people, the highest predicted population estimate for 2050.[2]

In theory, it should be an era of incredible abundance. But instead, we have an escalating number of hungry people: at least 783 million [3] are either hungry or malnourished, and due to the variable and even flawed ways institutions measure hunger, that number could even be as high as 2.5 billion.[4]

EXAMPLE

To challenge the relationship between food production and hunger, consider the case of two different famines in India in the late-1800s:

Jason Hickel writes that when the British colonised India, they imposed a new agricultural system, pushing farmers to cultivate crops for the export market, instead of for subsistence. In order to make Indian farmers more "productive", the British colonists encouraged villages to sell their grain reserves, and enclosed common lands and water sources. These reserves and common resources had previously served as a safety net when droughts came, allowing agricultural communities to survive.

1 Eric Holt-Gimenez et al. (2012). "We Already Grow Enough Food for 10 Billion People ... and Still Can't End Hunger". *Journal of Sustainable Agriculture*.
2 Eric Holt-Gimenez et al. (2012). "We Already Grow Enough Food for 10 Billion People ... and Still Can't End Hunger". *Journal of Sustainable Agriculture*.
3 UN Food and Agriculture Organisation. (2023). "122 million more people pushed into hunger since 2019 due to multiple crises, reveals UN report".
4 Hickel, Jason. (2019). *The Divide: Global Inequality from Conquest to Free Markets*. W. W. Norton & Company.

But because of the privatisation and export orientation forced by the British, when El Niño arrived in 1876 and brought a three-year drought, ten million Indians died of starvation.[5] When El Niño came again in 1896, nineteen million Indians died of starvation. The total death toll across these two drought-induced famines was 29 million.[6]

It would be easy to assume that 29 million Indians died because of a lack of food in the country. But as Hickel says:

> "Even during the height of the drought the country had a net surplus of food — there was more than enough to feed the entire population, it just needed to be moved to the right areas. But instead the rail system, obedient to market logic, was used by merchants to ship grain from the hinterlands into central depots where it could be guarded from the hungry and shipped to Europe." [7]

> "In 1877 and 1878, during the worst years of the first drought, they shipped a record 6.4 million tons of Indian wheat to Europe rather than relieve starvation in India." [8]

5   Hickel, Jason. *The Divide*.
6   Hickel, Jason. *The Divide*.
7   Hickel, Jason. *The Divide*.
8   Hickel, Jason. *The Divide*.

EMOTIONS

Agtech industry stories tend to be incredibly effective at leveraging two basic, powerful emotions — fear and hope.

More than anything, people tend to be afraid of insecurity. We fear not being able to feed ourselves and our children. Given the massive economic inequality that has been created today, and the immediate threat of the climate crisis, the fear of hunger and famine has been justifiably heightened. What corporations, governments, and institutions have done so well is convince people that without industrial agriculture, there will be widespread hunger. Today, it's gradually becoming more common to see proponents of industrial farming point out some of its flaws (like the soil erosion caused by intensive chemical use), but they never express an inch of doubt that it's still required to feed the world.

Dominant narratives suggest that at worst industrial agriculture is a "necessary evil". At best, it's a benevolent saviour. Because these narratives have so effectively convinced people that industrial agriculture is needed to keep hunger at bay, it makes it very difficult to persuade people to call for the dismantling or the radical transformation of the industrial food system. Fear of survival can, quite naturally, easily trump all other value considerations. If people think that systemic change will threaten their ability to feed themselves or their families, they are likely to oppose it, or at least far less likely to fight for it. In this way, agribusiness cleverly positions itself as our main source of hope. If we fear a world without industrial agriculture, then it's much easier to have hope in the technofixes that corporations continue to put forward.

EXAMPLE

In 2022, Sri Lanka experienced the largest economic and food crisis since its independence. The narratives that emerged to explain the crisis centred blame on the Sri Lankan government's 2021 ban on the import of chemical fertilisers and pesticides, and the overnight transition to producing 100% organic. The failure of Sri Lanka's organic farming policy is increasingly being used as a case study to show the success of the industrial food system, and the inevitable food crisis that will unfold upon transitioning to organic farming.

The New York Times

Sri Lanka's Plunge Into Organic Farming Brings Disaster

FP

In Sri Lanka, Organic Farming Went Catastrophically Wrong

TIME

The Crisis in Sri Lanka Rekindles Debate Over Organic Farming

Of course, there's an entirely different way to frame the story. We could instead center the ways in which British colonial rule restructured Sri Lanka's food system to feed the needs of the European market, systematically destroying much of Sri Lanka's native biodiversity and local food resilience. We could discuss how this restructuring made Sri Lanka dependent on importing essential food items post-independence, and forced the country to rely heavily on borrowing to counteract its growing trade imbalance and build public infrastructure. We could underline the ways in which Sri Lanka's loans were contingent on the IMF's structural adjustment policies, pushing Sri Lanka to cut down on government spending, slash subsidies, abolish price controls, devalue the rupee, and liberalise the exchange rate. We could also talk about how the imposition of the Green Revolution in the 1960s and 70s further devastated soils, forced farmers into debt, increased export dependence on a handful of cash crops, and destabilised food prices.

But the dominant narrative frame has largely left out this more complex political history and instead centred a single policy shift (the shift to organic). As a result, it's been highly successful at raising skepticism and fear around any country's desire to make a similar change.

STORYTELLING PRINCIPLES

WRITE FOR THE TOURIST, NOT THE PURIST

Within movements, because we're constantly discussing and organising around complex systemic issues, it can be easy to take for granted that others know, and care, about the same issues. If we assume that our audience cares we are unlikely to create the most clear and sharp argument, and are likely to only reach people who are already a part of the struggle. We can think of this audience as "purists" — people who have similar bases of knowledge, views, and beliefs as us. If we only craft stories for the purist, we won't be able to reach the audiences who may be more compelled or convinced by industrial agriculture's narratives. Our best bet is to never assume the audience either knows about the topic or cares about it. Instead, we can focus on reaching the "tourists" — people who share little knowledge, views, and beliefs with us; who know little to nothing about the issue at hand. If we're going to reach them, we'll need to find ways to make our stories simple, bold, and accessible enough to make the "tourist" want to stop and pay attention.

PULL, NOT PUSH

Because we believe so passionately in our struggles, it can be tempting to want our audience to be "on our side" right away. But, depending on their background, that audience may have a significant amount of learning and unlearning to do in order to see things from a different perspective. If we try to force them to see things our way — if we tell them that their version of reality is wrong — they may feel alienated. We have the opportunity to instead create stories that recognise, value, and meet our audience where they are at, and create a pathway for them to open up to new ways of understanding the world.

SHOW, DON'T TELL

People don't tend to change their perspective just by receiving new information. Most of us are able to see the world in a new way only after having a direct experience. Our stories can become a catalyst for change if we use them to transmit not just information, but also experience. Stories are lived. By using vivid imagery, descriptive language, and sensory details, we can make stories become more real, and give audiences the opportunity to feel as though they are a part.

STORIES AND NARRATIVES ARE ALIVE

Just like seeds, stories and narratives carry our cultural memories. And just like seeds, in order for our stories and narratives to be able to grow and nourish us, we must allow them to adapt and evolve to new conditions and understandings. They are not meant to lock us into a static, unchanging perception of reality; instead, they are an opportunity to respond to the complex, dynamic world around us. As such, it's important for us to always be open to our stories and narratives changing.

STORYTELLING CHALLENGES

Creating compelling stories to counter agtech industry narratives comes with real difficulties. Keep an eye out for some of the following:

DISPROVING INDUSTRY CLAIMS

The agtech industry claims, whether or not it's true, that their products create food that is higher yielding, more nutritious, and better adapted for the climate. The industry has teams of co-opted scientists ready to produce the studies needed to defend these claims. It's easy for civil society to be drawn into a position where they feel obliged to debunk and discredit false claims, which is extremely time consuming for movements with fewer resources.

CO-OPTATION OF SUSTAINABILITY/ REGENERATIVE LANGUAGE

The agtech industry has been highly effective at co-opting narratives around alternatives to industrial agriculture. Examples include "regenerative agriculture" and "nature-based solutions". Sometimes the industry even uses the term agroecology to describe high-tech low-input farming, integrated with practices like intercropping. Extreme examples of co-optation can blur the storytelling landscape and make it difficult to determine whether or not the story being promoted is in alignment with food movements.

THE APPEAL OF NOVELTY

Agtech solutions have the appeal of always seeming new. Ideas that are new are often assumed to be better by default. This creates a feeling of optimism and trust that scientists and experts have things in hand, which can be a powerful emotion when people feel so overwhelmed in the face of many different social and ecological crises. Novelty also creates an instant media hook — new products are considered "newsworthy" in a way that traditional agricultural techniques are not.

CASTING MOVEMENTS AS CHARACTERS

The types of stories that the media likes to pick up and publicise are often focused around individual characters. As audiences, we are drawn to individual stories, as they help us relate, sympathise, and evoke emotion. As movements, our stories cannot be defined through a single individual — they must be collective. The challenge is to be able to represent movements as compelling and relatable characters that people can care about without reducing a whole movement down to one individual or spokesperson.

THE ALLURE OF TUNNEL VISION

When we are flooded with information about so many impending crises, narrowing our focus can be comforting. Technofixes rely on this comfort. We have become more and more alienated from governance decisions and used to facets of our lives being changed through new technologies. It is commonplace to respond to the mention of a problem with the statement: "There's an app for that." Technological solutions are concrete, tangible, and immediate in a way that political and social change is not. We understand causality much more easily. Technofixes also narrow the frame of view in a way that makes it easy to hide the causes of problems and avoid casting or admitting blame, all of which make these stories simpler to latch onto.

STORYTELLING OPPORTUNITIES

SHOWING THE BIG PICTURE

Movement narratives are often at their most powerful when they zoom out to look at the big picture, utilising a holistic view of social, economic, political, and ecological systems. Looking at a scenario in a very narrow way can make a technofix appear reasonable, but once the frame is widened to reveal the big picture many forms of agtech are revealed to cause more problems than they solve, if they really solve problems at all.

EMOTIONAL RANGE

As social movements struggling for true change, we tend to embrace naming root problems and oppressors. Conflict can be daunting, but it also makes stories exciting and inspiring. In this way, movement stories can draw from a wider range of emotions than industry narratives, since the goal is to mobilise communities and inspire action rather than to sell a product.

CENTRING THE POLITICS OF TECHNOLOGY

The debate around agricultural technologies tends to hinge on whether they are "good" or "bad" for our communities. The agribusiness industry loves to keep conversations within the bounds of whether or not a product is more efficient, resilient, nutritious, and productive, or which practices are most effective (industrial, organic, agroecological). In this way, they keep the conversation focused on technical questions. While it is sometimes necessary to get into the details of a technology's strengths or weaknesses, it is usually strategic to avoid the trap of contesting industry claims and focus instead on big picture questions of sovereignty, ownership and control.

Centring the politics of technology can also make civil society narratives more difficult for industry and governments to co-opt. Narrative co-optation is somewhat unavoidable, as it is a standard industry strategy, but it's far more difficult when we keep the focus of our own narratives firmly on political questions around ownership and control. It's simply not possible for corporations to credibly claim that their technologies can ever be truly community-owned and controlled. Movements have the upper hand when they frame the debate in terms of political arrangements and power relationships.

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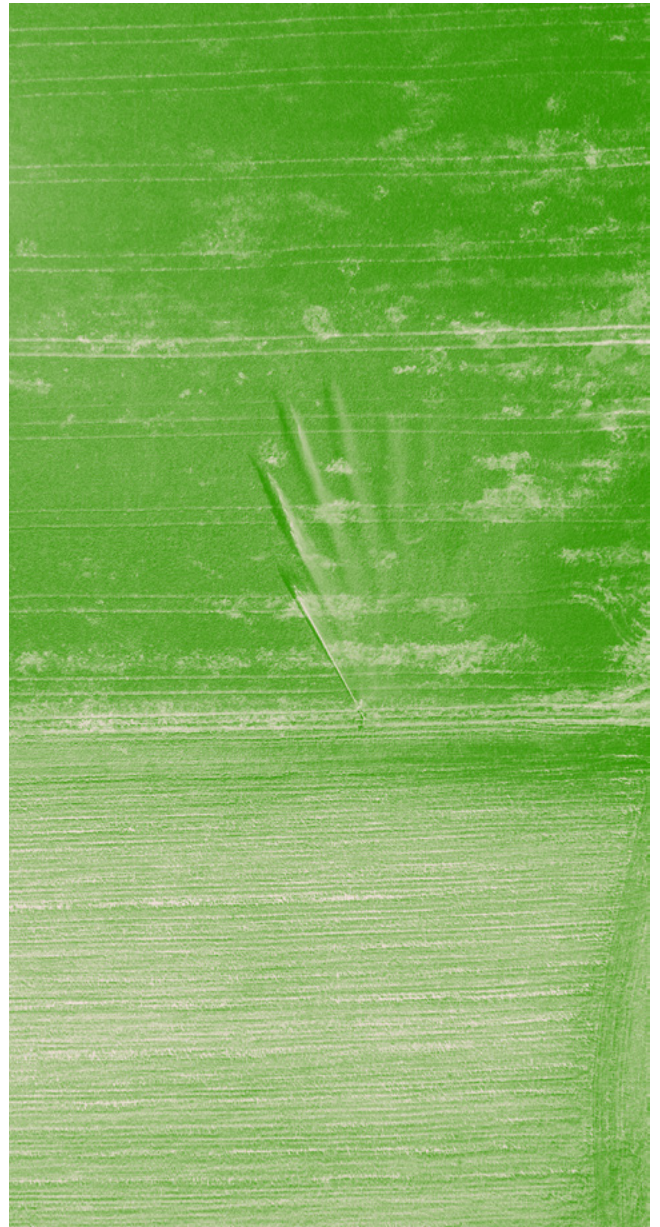
CHANGING THE AGTECH NARRATIVE

In the series of narrative workshops hosted between April and July 2023, participants from different movements and organisations examined a suite of different corporate agtech stories. Our common goal was identifying the core industry narratives at the heart of these disparate stories.

The industry narratives we identified are:
1. Technology will save us.
2. Corporations drive innovation.
3. Farmers are entrepreneurs.

In order to begin shifting the industry frames, we propose two different strategies. One is to use counter-narratives to directly oppose and challenge the dominant narratives. The other is to put forward an alternative narrative.

The counter-narratives we identified are:
1. Agtech corporations = pushers.
2. Agribusiness entrepreneur = captured consumer.

An alternative narrative we want to uplift is:
1. Farming is self-determination.

In the following pages, we break down these different narratives.

ANALYSING INDUSTRY NARRATIVES

Industry Narrative 01:
"FARMERS ARE ENTREPRENEURS"

Corporations, governments, and institutions pushing an agtech agenda suggest that the only way to think about agriculture is as a business. We can think of this as the shift from agri*culture* to agri*business*. Agribusiness is concerned with one question: How can we produce more food at a lower cost? In short, they define the goal of farming as making as much money as possible. Social, ecological, and political values are not important.

We frequently see the claim that farmers aren't productive, profitable, or successful because they fail to think of themselves as entrepreneurs and make "smart" business decisions. This frame is particularly marketed to younger generations of rural communities. It's a strategy to indoctrinate, to push young farmers to see themselves as "business people", and to cast aside the "backwards" subsistence-based systems in which they were raised. This strategy effectively creates a culture where young farmers are encouraged to look down on their parents and elders for their "outdated" agricultural practices, and puts pressure on older generations to adopt the "advanced" views of their children.

Corporations sell the idea that farmers who remain rooted in self-sufficient practices are stuck in the past, holding back and impoverishing their communities and themselves. "Entrepreneur" means becoming "empowered". It means making business decisions that will give a farmer the income they need to be more free and to guarantee the freedom of their children. "Entrepreneur" has become synonymous with "independent". It's not easy to challenge the idea of "entrepreneurship", because it can allow farmers to feel more dignified, at a time when agriculture is so devalued, and children are taught that they should leave their rural farming lives behind to progress and advance.

Industry Narrative 02:
"TECHNOLOGY WILL SAVE US"

This is the "technofix" narrative — the idea that technologies are the only way to solve complex structural problems. The idea that we can "innovate" our way out of any issue is compelling — first, because it's rooted in optimism and hope; second, because it encourages us to direct our focus away from root problems (which would require changing the status quo) and towards quick fixes. The technofix comforts the audience by reassuring them that they won't have to change their attitudes and behaviours, and that "experts" can invent a way out of any crisis.

This frame obscures history. It might recognise that past technologies created problems we now have to address, but it never considers whether those problems indicate systemic failures. Instead, it frames problems created by past technologies as "unavoidable" or at least not worth focusing on. The corporations and institutions that push this narrative suggest that the only real consideration is how we can create new technologies to improve on past technologies (as opposed to questioning whether past technologies were needed in the first place).

Most of the agtech industry's "new" agricultural technologies are rooted in the idea of "precision" or "climate-smart" agriculture. The idea here is that climate change is making farming more unpredictable. These digitally-driven technologies are therefore being sold as ways to mitigate risks caused by our changing environment while increasing yield.

A powerful way that agtech sells its products and initiatives is by using the label "smart". We see it everywhere — "smartphones", "smart sensors", "smart farming", "climate-smart agriculture". All "smart" really means is "digitally connected". But by attaching this label to any agtech product, it makes any non-digitally-connected tool, practice, or platform seem the opposite – "dumb". By equating digitalisation with intelligence, this frame suggests that incorporating digital systems into society is the natural course of evolution instead of a corporate ploy to increase profits. As a result, it makes communities feel ignorant for not adopting new technologies.

The narrative that agtech will save agriculture also relies on the assumption that farm work is drudgery — hard, dull, and humiliating. The industry capitalises on this perception by offering new agricultural technologies to escape back-breaking labour. Most corporate technologies are pitched as opportunities to "free labour from the farm". The central idea is to make farming easier by replacing human labour with mechanical and digitally-driven tools. Regardless of how they are marketed, most corporate technologies end up having the effect of replacing farmers and farmworkers, who are deemed "inefficient" and "costly".

Some technologies may not physically replace farmers. Still, they replace farmers' existing systems of gathering and processing information, observing ecosystems, and creating new knowledge. Examples include data sensors that gather information about the soil and drones that scan and map fields. The idea behind these data-accumulation technologies and the associated digital advisory is to enable farmers to make "smarter" decisions to increase productivity and farm efficiency. But in changing how farmers acquire information about their local ecosystems, agtech has the potential to compromise farmers' autonomy, erode traditional knowledge systems, and de-skill.

Industry Narrative 03:
"CORPORATIONS DRIVE INNOVATION"

The agribusiness industry has been incredibly effective at convincing people that expensive new technologies are the key to solving hunger in the face of climate change. As a result, it's been easy for them to position themselves as the "experts". Suppose we believe that the technologies that *really* matter are those that take teams of scientists, engineers, and coders to make, and massive data servers to run. In that case, it's easy to believe that the entities that have access to all those resources and capital are the ones we should turn to for guidance.

The narrative being pushed is that if we want world-changing innovation, we must trust in and enable the private sector to have free reign. This is deeply ingrained in the ideology of neoliberalism. Within this frame, the government's role is not to oversee or regulate but to create the conditions for corporations to exercise the greatest possible freedom. So much of free market capitalism is justified through the idea that corporate freedom and competition allow for the most impactful research and development.

Of course, corporations wouldn't be able to research or develop anything without hordes of scientists and engineers carrying out and legitimising their work. As governments have ceded more and more power and control over to the private sector, scientific funding has shifted away from public institutions and towards corporations. As a result, so much scientific research within agriculture exists not to study and evaluate pressing problems but to justify corporate technologies. This corporate co-optation of science is rarely called out or addressed.

For a long time, the agribusiness industry disregarded farmers, centring itself as our collective saviour. Now that agribusiness corporations and related institutions have gotten pushback from civil society for erasing the role of farmers, they have repositioned themselves. Corporations now suggest that farmers are actually "demanding" solutions from them, and they (corporations) are simply responding to that call. In this way,

corporations strategically suggest that they are, contrary to common criticism, listening to farmers.

Within this frame, farmers are placed in a very specific role in relation to innovation. Corporations design and build technologies that they then bring to farmers to "test" and later to "adopt". In this context, farmers are not being recognised as active innovators themselves — they are test subjects, being used so that the agribusiness industry can push their products to other farmers. But the industry narrative presents it differently — it frames farmers as vital voices who determine whether technologies are "up to the task" in real landscapes.

IDENTIFYING COUNTER-NARRATIVES

Counter-Narrative 01:
AGTECH CORPORATIONS = PUSHERS

Organisations that leverage farmer/entrepreneur narratives effectively, like One Acre Fund or the Alliance for a Green Revolution in Africa, rely on a development model that offers farmers packages of seeds, chemicals, and sometimes tools and financing. They claim that they are uplifting farmers' agency, but in reality, they are putting farmers in the position of passive recipients.

Today, farmers are encouraged to adopt new technologies and practices developed without their insight and input. "Adopt" translates to "buy". The only way that farmers can reap any supposed benefits of a technology is if they purchase it first. Most corporate agricultural technologies are only accessible to farmers if subsidised or financed. These subsidies generally take the form of a) direct institutional financial aid enabling farmers to purchase technologies that would otherwise be unaffordable and/or b) indirect support that incentivises industrial agriculture by making the technology cheaper through tax exemptions, research and development support, or other policies that favour corporate-controlled technologies. However, both forms of support can just as easily be withdrawn, leaving farmers in a desperate place.

Corporate-controlled technologies are usually pitched as quick fixes (e.g. "high-yielding" seeds and agrochemicals) but can only work with the addition of more inputs over time. In the same way that a human body can become dependent on a drug, the land becomes dependent on the synthetic inputs supplied. Over time, the land becomes depleted, and a withdrawal of inputs can lead to collapse. Corporations are intentionally getting farmers "hooked" on a system that will later leave them worse off than when they started. Given the economic squeeze farmers worldwide are already facing, any solution requiring farmers to become more dependent on corporations can't possibly benefit them. If anything, it guarantees that farmers find themselves deeper in debt.

Additionally, the vast majority of the new agricultural technologies that corporations are pushing still rely on fossil fuels — to mine the materials needed to make technological components, to manufacture the technologies, and to operate them, as well as to make the chemicals that will need to be applied alongside the new technologies. While the industry claims that new digitally-driven tools are more precise and fueled by more sustainable energy systems, almost all are still fossil-fuel-dependent. Incredibly, corporations can un-ironically claim that they are "solving" the climate crisis with technologies rooted in the same extraction and emissions that have caused the crisis in the first place. In this context, agtech corporations become the worst type of pushers — addicted to the very products they are selling.

Agtech advertises its ability to create revolutionary farming technologies as well as technologies to "connect farmers to the market". The industry's pitch is that farmers today are doomed to fail without being hooked into e-commerce platforms through which they can sell their products. But the platforms the agtech industry is promoting are less about giving farmers a better way to sell to consumers and more about giving agribusiness corporations a better way to sell their products to farmers. Once farmers are connected to new digital platforms, through which their data can be easily tracked and harvested, it's far easier for corporations to target them with their products (seeds, chemicals, fertilisers, and more technologies). In other words, connectivity represents a more precise means of pushing their products.

Counter-Narrative 02:
AGRIBUSINESS ENTREPRENEUR = CAPTIVE CONSUMER

The rise of digitally-driven technologies is challenging ideas around autonomy, ownership, and control. Take the example of John Deere, one of the largest corporations in the U.S., known for producing agricultural machinery. In 2016, John Deere stirred up controversy when it put software locks on its equipment, meaning only licensed dealers can make repairs.[1] In other words, the company effectively made it illegal for farmers to repair their farm equipment themselves or take it to independent repair shops. John Deere also made it so that they could remotely disable and shut down equipment at any time. They did this by utilising two digital rights acts to assert that people who buy their equipment don't own either the physical tool or the software within it — they are only purchasing a licence to use it.[2]

Corporations claim that advanced software technology gives farmers more knowledge, insight, and capacity. But, even if that knowledge, insight, and capacity are relevant to a farmer's needs, what does it matter if they don't have autonomy over the technology? If a company can dictate the exact terms of use for their technology, and disable/deactivate it at will, then it never really belongs to the farmer. If a farmer doesn't own it, they can never truly have autonomy. And given what we know about the immense potential for data harvesting created by new technologies, we can argue that these technologies give corporations the capacity to control farmers and their decisions in ways that are more extractive and alienating than before.

In this way, we can think of reframing "entrepreneur" (as presented by these organisations) as an "captive consumer". "Entrepreneur", as corporations and institutions define it, actually means fitting into a system

1 Walsh, Kit. (2016). "John Deere Really Doesn't Want You to Own That Tractor". Electronic Frontier Foundation.
2 Thomas Jeffrey Horton and Dylan Kirchmeier. (2020). "John Deere's Attempted Monopolization of Equipment Repair, and the Digital Agricultural Data Market - Who Will Stand Up for American Farmers?". *CPI Antitrust Chronicle*.

where farmers don't control the terms. They may have more short-term economic freedom, but that can only be achieved through long-term dependency on corporations. The agtech "entrepreneur" has far less autonomy. They are obliged to plant the seeds they're told to plant; they use the chemicals they're told to spray; they work the soil in the way they're told to; they sell their crops in the way they're advised. The "entrepreneur", as agribusiness presents it, is an identity that allows corporations to extract even more from farmers by targeting them at all stages of agriculture (as opposed to just the final marketing of their products).

UPLIFTING AN ALTERNATIVE NARRATIVE

FARMING = SELF-DETERMINATION

The agtech industry frames markets (which they dictate) and technologies (which they own and create) as the only way for farmers to become more secure and empowered. Their narratives operate under the assumption that ownership – whoever controls something and makes decisions about it – doesn't matter.

As corporate consolidation across all industries increases, it becomes more likely that people will hold this assumption, and forget that we, as individuals and communities and even states, were more autonomous in the past. It is easy to unthinkingly adjust to a "new normal", where a small number of corporations in each sector set the terms for our lives. Confronting this systemic consolidation becomes daunting. However, we can resist the erosion of our autonomy by restoring pride in the idea of self-determination.

At its core, self-determination is the idea of being able to control one's own life and for communities to determine their own futures. While many of us have become accustomed to a reality where we have little freedom, the idea of freedom itself is still as powerful as ever. No one wants to believe they're not free. And nothing is as elemental to our freedom as the ability to control how we feed ourselves and our communities. Being fed is one of our most basic human needs. When we feel confident that we can meet that need, we are secure.

Businesses can close. Markets can crash. Money can become worthless. What will never change is the value of food. The richest person and the poorest person in the world both need to eat. And what the richest person in the world can never buy is the web of relationships required to grow food within a local ecosystem in ways that will sustain generations to come. Only with the security of feeding ourselves can we truly become secure in other areas of our lives.

African revolutionary Thomas Sankara once said, "He who feeds you, controls you." If someone else dictates the terms by which your community

feeds and cares for its members, then they control your community's survival, and they control you. The central strategy of the agtech industry is hooking farmers into global markets and technological systems that farmers don't control. The more farmers have to rely on those systems to gather knowledge and make decisions, the more autonomy they give up. Farming carries an often unrecognised power. It can represent resistance in the face of forces that aim to extract every last drop of profit that they can from the world. In this way, farming can represent a commitment to life.

Feeding our communities takes a tremendous amount of unseen knowledge and effort. Farmers have been culturally devalued for a long time, led to believe that their work is less important than that of doctors, lawyers, scientists, and engineers. Agtech corporations suggest that they are committing teams of "experts" to agricultural research and development because they want to uplift and support the value of farmers. Essentially, they're saying, "You just grow the food. We'll take care of everything else."

We can push back against this compartmentalisation by emphasising that farmers are scientists. They are engineers. They are innovators. They are entrepreneurs. They are historians. They are artists. They are guardians, protectors, defenders, and caregivers. While corporations are encouraging farmers to give up these identities in the interest of ease and progress, we can assert that farmers are self-determined because they hold this multitude of identities.

Leah Penniman has said, "To free ourselves, we must feed ourselves." When we control the ways in which our communities are fed, we control our destiny. While the industry sells the idea that farmers farm because they have no other choice, the narrative of self-determination encourages farmers to declare: "I'm a farmer by choice."

FRAMING/ REFRAMING

Our intent is to identify and challenge the most fundamental narratives that define agtech's frame. However, there are unstated beliefs and values that cut across all of the core narratives. Below we've outlined a few key examples of these beliefs and values, with proposals for reframes.

AGTECH FRAME	REFRAME
Technological progress is linear. Today is the most advanced time in human history. Our progress in farming looks like a continuous path of technological innovation, from peasant, subsistence agriculture to expensive, digitally-driven, precision agriculture. Societies that don't use industrial technologies are backwards, unintelligent and living in the past.	**Growth is dynamic.** While we might have more information, or new ways of transmitting it, that makes us no better than generations who have come before us, and those who will come after us. Like our ancestors, we make decisions in our lifetimes about how to structure systems, whether social, political, economic, or ecological. And like our ancestors, we will make many mistakes. Having humility in regards to how we discuss history gives us the opportunity to not repeat past failures, and to imagine alternative futures.
Technological progress benefits everyone. Because of the continuous process of technological advancement, humanity is better off today than ever before. More advanced technologies enable more human freedom.	**Historically, technological progress has been used to oppress.** In an unequal world, technology only consolidates power. Without equity in governance and decision-making, and without the distribution of wealth and resources, powerful new technologies are disproportionately used by the few to disenfranchise the many. Benefiting everyone requires reshaping political and economic systems.
Questioning technological progress is anti-science. Scientific knowledge is the highest, and most objective, form of knowledge. Only those who have trained within academic institutions and who have gained access to privileged spaces can have valid knowledge about natural systems and processes. Other forms of knowledge are biased and influenced by superstition or political values and cannot be trusted as being rigorous or reliable. Attempts to question technologies that have been backed by science are unfounded.	**Science *is* questioning. Inquiry is the foundation of science.** True science is achieved through curiosity and criticism. Scientific inquiry has, throughout time, been defined and challenged through experimentation and direct experience. The knowledge and questions posed by those who have lived on, and worked most closely with, land, are just as valid as those of "established scientists". Continued ↓

AGTECH FRAME	REFRAME
We must control nature. We exist separate from, and often in competition with, nature. There are limited resources on this planet, and the key to our survival is learning how to predict, control, and even "improve" on nature. This includes manipulating the building blocks of life — genetic information in the form of data. The best way to do that is by gathering knowledge about the natural world through Western, scientific study and using this knowledge to harness nature's power for our own ends.	**We are nature.** The separation between humans and the non-human world is a colonial construct that enables extraction and exploitation. Land is a living being; our kin; a relative; a part of us. We are no less related to each other than we are to the trees. Because we do not have dominion over nature, our work is to understand the abundant ecosystemic relationships that already exist, and how we can be a good relative within living systems. Humans can only thrive if the whole ecosystem thrives.

03
RESOURCES

KEY AREAS
OF AGTECH

The following information about agricultural technologies has been summarised from a series of articles written by ETC Group and published by Heinrich Boell Hong Kong.

The proponents of agtech are part of a broader swathe of "tech-solutionists" driving forward a tsunami of new technologies. These include digitalisation (the collection and processing of data on human behaviour, agriculture, fishing, and ecosystems); biodigital convergence (the synthesis of new living organisms and processes from gene sequences); and geoengineering (the intentional, large-scale technological manipulation of Earth's systems).

01: DIGITALISATION

Agrichemical companies have gambled on a series of mega-mergers with data companies. Their aim is to accumulate "big data" – a massive volume of information enabling corporate algorithms to observe patterns and make predictions and decisions, in place of farmer autonomy. This accumulation is happening in ever-increasing volumes through collection devices placed in self-driving tractors, drones, sensors in the field, and even devices attached to plants and livestock.

Advertisements portray entrepreneurial farmers, smartphones in hand, controlling their own data. But in reality, every collection device gathers and transmits data to corporate data centres, which use their algorithms to process the statistics and provide what the corporations have dubbed "artificial intelligence" (AI). Whoever owns these data sets can then sell them as a commodity to other corporations, such as land speculators, commodity traders, hedge funds, and seed breeders.

Ultimately, it is not farmers who will gain a useful overview of their fields, but companies like Bayer and its partners – firms like Microsoft – who will gain a detailed digital overview of entire land, water, and food flows. The insights from this ecological cache will enable them to better target farmers to persuade them – and likely lock them into contracts – to adopt practices and products that suit the shareholders of mega-corporations.

Giant tech companies have also invested billions in food warehousing, retail, and logistics subsidiaries. The rapid acceleration in online food shopping during the COVID-19 pandemic has strengthened their control over food delivery, grocery retail, and distribution.

Overall, the digitalisation of food and agriculture comes with a range of serious potential impacts. In addition to massively increased surveillance, extraction, and exploitation of people, it can contribute to deskilling, displacement, and alienation. In addition, given the increased energy use needed for data collection and storage, and the extraction of raw materials needed to make digital technologies, digitalisation takes a heavy toll on the environment.

02: BIODIGITAL CONVERGENCE

The ongoing development of molecular manipulation technologies includes the application of genetic engineering to agriculture, aquaculture, and forestry. Living processes are increasingly being reimagined as data, which is then extracted and processed as a commodity. This has been described as data colonialism, reminiscent of resource extraction in the era of European colonialism.

Take GMOs, for example. Most GMOs in agriculture today are engineered into one of two types of plants – one that is resistant to herbicides, like glyphosate; the other that produces chemicals that are toxic to insects. The most common GM crops today are soybeans, corn, rapeseed, and cotton. Contrary to industry claims, the use of GMOs has actually increased the application of toxic chemicals, and has almost always made matters worse for people and ecosystems wherever they have been deployed.

Due to the public backlash against GMOs, the agribusiness industry has developed new terminology, such as "gene editing". This is simply a marketing tool; all that has changed is a streamlining of the engineering process, reducing the cost to remove or transfer genetic material within the same or closely related species. CRISPR/Cas9 is the best known of these new genetic engineering techniques.

Among other uses, CRISPR/Cas9 has enabled the development of an experimental technique its inventors have dubbed "gene drives". Gene drives allow scientists to place "exterminator genes", as they might better be known, into insects and some other sexually-reproducing organisms in the laboratory. These genetic elements are self-propagating and can be passed down through generations. In theory, these gene drives allow genetic engineers to deliberately spread a particular genetic code with the intention of wiping out a target population, often to control pests and disease. Furthermore gene drives may eliminate both target and non-target species, and the impacts that gene drives could have on ecosystems is uncertain. Just like pesticides and GMOs before them, gene drive organisms (sometimes called GDOs) could eliminate beneficial pollinators, yet come with no guarantee that they would be able to achieve the outcome for which they have been designed.

One immediate threat from the commercial scaling-up of genetic interventions is the use of "gene-silencing pesticides", which are synthetic nucleotides (such as artificial RNA) designed to alter the genetics of organisms with which they come into contact. Attempts to deploy genetically engineered microbes into agricultural soils are another risky venture.

Another market that corporations are eyeing for future profits through molecular manipulation is "alternative proteins", including dairy and meats ("alt-meat"). In response to policy priorities to reduce meat consumption, several of the world's most powerful businesses are now proposing engineered protein products, including simulated eggs and simulated dairy products that are cultivated in sterile vats of engineered microorganisms.

03: FINTECH

Financial technologies (also known as "fintech") refers to the application of digital technologies to the finance sector. It encompasses digital payments, the computerised management of markets, and novel digital currencies, such as cryptocurrencies, increasingly mediated through encrypted online digital ledgers (blockchains). Terms associated with fintech, such as "smart contracts", conceal both their high energy use (the environmental cost of the blockchains they require) and the fact that they hand control over resources to unaccountable and unscrutinised corporations.

Fintech can also include the financialisation and trading of "ecosystem services" (the corporate term for the natural ways in which ecosystems make the planet liveable), such as carbon, nitrogen, and water cycles. The intention is to monetise each of these natural services through digital financial platforms.

AGTECH, FOR DIFFERENT SECTORS

AGTECH FOR INVESTORS

The term agtech is used widely to drum up investment for new start ups. In an investing context, agtech is pitched as a useful concept because it opens up a new area of investment. For investors, the value of agtech is only about meeting the needs of farmers or eaters in so far as they are a new market, but more importantly about creating a shiny new idea that can get "angel investors" to put their money into a startup or a new idea. With sufficient promotion and the perception that this technology could create a new market, agtech could become a bubble and an easy way to make quick money through speculation.

AGTECH FOR TECH GIANTS

Tools like AI and Blockchain have been put to various uses and entrepreneurs are constantly looking for new ways to take the algorithms that have been developed for facial recognition or financial technology and apply them to new areas — with the goal of creating a successful business. For huge technology corporations, agriculture represents a field where the skills, tools, and methods they have already developed can be put to new, profitable uses.

AGTECH FOR BIG AG/BIG FOOD

Since the Green Revolution, Big Ag and Big Food have been working to capture more and more of the value of agriculture. They work to find tools that will require farmers to spend less on labour and more on various technologies including "designer" seeds and chemical fertilisers. Their efforts within agtech are advertised as opportunities to "streamline processes", and "mitigate disruptions", but the main effect is to extend their control over the industrial food chain. When pitching to politicians and policymakers, Big Ag and Big Food tend to frame their concerns in terms of "feeding the world" and protecting the food chain from climate disruption. This dovetails neatly with the interests of tech giants and agtech investors. The endgame here is about extracting more value for their shareholders by any means necessary.
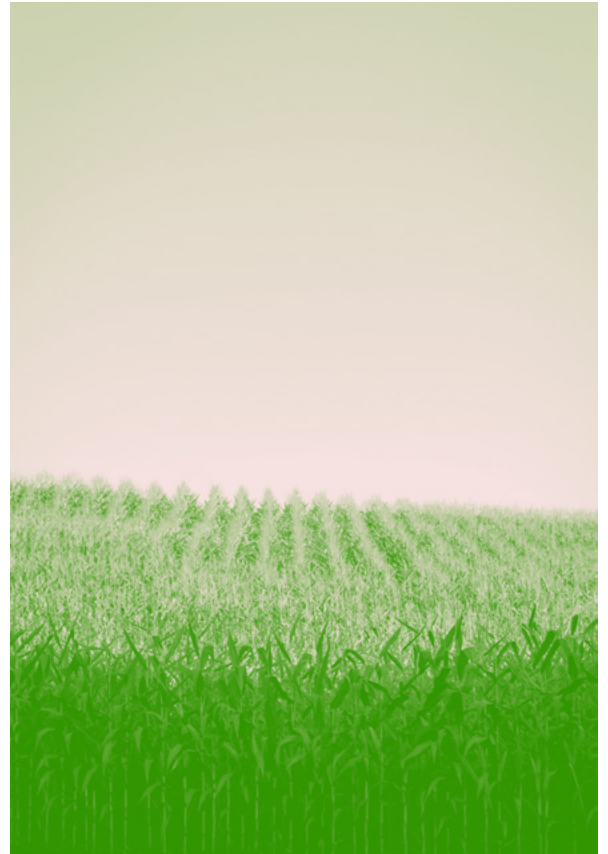
MEDIA ANALYSIS 101

Movements can often increase their impact by taking time to understand how and when the media is reporting on the issues they care about. This short guide suggests an approach that involves analysing a small sample of online news media*. The results can equip movements with valuable insights for creating counter-narratives, and provide a solid basis for more in-depth narrative analysis.

This 5-step approach is not expensive or overly time-consuming. If you pick the right media sources, 10-15 articles should give you an overview of dominant narratives and counter-narratives. Most analyses and recommendations can be completed in approximately 5 days, depending on the complexity of the issue and volume of media coverage.

*Note, this approach does not cover social media.

STEP 01: SCOPE THE MEDIA LANDSCAPE

Time estimate: 0.5 day

SEARCHING
Start by searching online news coverage to get an overview of how the media is reporting on your issue (Google News is a free option). Your search will probably focus on the top daily newspapers and broadcast news outlets, but may include some more specialist media outlets, such as scientific journals or issue-specific trade media.

KEY TERMS
Note that sometimes reporters may use a variety of different terms when referring to an issue. To ensure your search captures representative coverage, come up with a shortlist of commonly used terms.

QUESTIONS
1. How widely has the issue you are analysing been reported in recent months?
2. Which main outlets are covering — or ignoring – the issue?
3. How deeply do articles examine the issue?
4. Are the articles covering the issue spread across the socio-political spectrum, or is it only covered by a section of politically-aligned — or specialist — media?

NOTES
Make a note of your answers. Also note down articles that cover the issue in greater depth. You may find that some articles are repeated across different news outlets. Media companies often re-run articles published in mainstream outlets, or buy articles from international news wire services (such as Reuters, Agence France-Presse, and Pan-African News Wire). The sources of these re-runs have a lot of influence over how narratives play out across the media, so consider adding one to your selection for

analysis in Step 2. Note down the name of the original source (which is usually cited at the top of re-run articles), along with the name of the original author, if it is given. You may recommend time is invested into finding key reporters' contact details and organising a briefing for them, as part of your list of actions in Step 5.

STEP 02: PREPARE. PRIORITISE. PLAN.

Time estimate: 0.5 day

Before you start analysing articles, set clear aims and parameters to keep your research manageable. The following questions can provide a solid starting point.

QUESTIONS
1. What is the purpose of the analysis?
2. Which geographic regions or countries are most important to your campaign?
3. Which timeframe is most important to your campaign (e.g. a specific decision-making meeting or technological "advance")?

SELECT ARTICLES
Draw on the notes you made during Step 1 to select 10-15 articles you think are most relevant to your research. Your list will probably include a selection of the more in-depth articles you identified and some of the source articles, due to their reach and influence.

ORGANISE ARTICLES
List your selected articles, including the name of the outlet, date of article, the name of the journalist, and their reporting role (environment, science, technology, politics, etc).

NOTES

Note that when stories are reported by political correspondents (as opposed to environment or science/technology reporters), it can suggest that people's interest in the issue is high and it is on decision-makers' agendas. At these moments, movements have a peak opportunity to engage media and influence public opinion.

STEP 03: ANALYSIS

Time estimate: 1.5 days

Once you have decided your parameters, structure your approach by selecting categories of analysis.

Common categories are:
A. Narrative Framing and False Assumptions
B. Wording and Tone
C. Visual Language
D. Message
E. Messenger

Capture your results against each category and look out for any common themes across your set of articles.

A. NARRATIVE FRAMING AND ASSUMPTIONS

This is probably the most important factor to consider when determining dominant narratives. To analyse narrative (or story) framing, think about how reporters connect a topic to the popular stories that already exist within people's minds. Frames reflect a specific viewpoint or mindset. They carry with them strong associations that can be negative or positive, and their use tends to activate those associations in the minds of readers.

By identifying which frames have been used in each article, you can determine some of the underlying messages that the stories are sending, or assumptions they make. Once the frames are identified, it is easy to gauge which narratives they uphold (and which they obscure), and whether their underlying assumptions are true or false.

Articles that follow dominant narratives often start with a false assumption, often in the headline and/or opening paragraph. Common false assumptions are that the urgency for a particular policy or technology outweighs the risks. For example, that we urgently need to genetically modify crops to feed the world, or to modify mosquitoes to protect millions of children dying from malaria. In Western media, these narratives are often underpinned by assumptions of need on the part of developing countries, as a basis for justifying the imposition of particular technologies or agricultural models, for example.

Read your selected articles and think about how each one frames the issue at hand.
1. Which narratives do you think are accurate, partly accurate, or untrue?
2. Which topics, angles or viewpoints are covered, and which are ignored or featured less centrally in the story than others?
3. Which headlines are based on false assumptions promoted by those pushing the dominant narrative?

Look for patterns and trends in the reporting and capture your findings for each article.

B. WORDING AND TONE

Look deeper into each article. Are there certain words, phrases, metaphors, or statistics that are commonly used? You can start by asking these sorts of questions:

1. Why has this particular word, phrase, or metaphor been chosen?
2. Has it been chosen to trigger a particular emotion or underlying assumption in the reader?
3. Does the language used carry implicit bias (usually stemming from a false assumption)?
4. Does the language used justify or legitimise certain people/institutions? Does it deligitimise others?

For example, media reports that sway towards the dominant narrative around genetically modified organisms (GMOs) often refer to civil society as "eco-warriors". Through this label, stories end up reinforcing the idea that resistance to GMOs is an extremist viewpoint held by a small subset of the population, rather than a majority opinion.

C. VISUAL LANGUAGE

Look beyond words to the images used. Images can be just as powerful in reinforcing bias, yet they tend to be overlooked in analyses. The graphics or photographs chosen to illustrate an article often provide insight into the viewpoint of the media outlet, or a particular reporter, and can serve to reinforce the dominant narrative.

Examine the images carefully to see what underlying messages they carry. Ask yourself the three questions outlined in Section B. Consider whether they are drawing on a false assumption in the reader, such as an urgent need for a particular technology, or conveying a "solution" to a "problem", presented through a distorted narrative frame.

For example, many articles about agricultural technologies depict scientists in white coats working in high-tech laboratories. These images are intended to appeal to a sense of trust in science. They serve to minimise fears of the featured technology. In such cases, when referring to those responsible in your own communications, it can help to disrupt this assumption by referring to them as "engineers" or "technologists" instead of "scientists", for example.

VISUALS FROM THIRD-PARTY SOURCES

Media outlets prefer to source visual materials themselves in the interest of being independent. However, cost and time constraints means they often accept visual materials from others. This provides an incredibly powerful opportunity for proponents of both the dominant and counter-narratives to get their messages across.

Visuals provided by third-party sources are credited. Check the credits to see whether they have been provided by proponents of a dominant narrative. Consider how you can counter any distorted visual messages through your communications materials, or by providing your own images to the media.

For example, photographs of people affected by – or protesting against – an issue are widely published. If you can provide these, make sure they are good quality and, ideally, include your main message. Providing these sorts of photographs around political meetings, where there is a lack of visual content for reporters, can be especially effective.

D. MESSAGE

Journalists are charged with reporting in a balanced way but, consciously or not, they often present messages in ways that reinforce the dominant narrative.

1. List the main messages that each article conveys.
2. Is there a fair balance between quotes from each "side" of the argument; is each view fairly represented?
3. Check the list against your organisation's key messages to assess how widely they are being reported by the media. If they are, make a note of how and when they are being reported. Are they presented in a way that advances your campaign, or as a marginal voice (a journalistic "nod" to suggest that they're reporting "both sides"). Do the same exercise for the dominant narrative and compare the two lists.

E. MESSENGER

Whoever is quoted within a news story about a particular issue has an impact on how that issue is portrayed to the public.

1. Tally which groups are quoted most often, along with how many people in each group are quoted, and create a chart to help analyse why some groups are quoted more than others.
2. Check which quotes support the various opinions expressed in the dialogue around an issue and assess whether each article presents a balance of opinion, or not.
3. Make a note of how often and who is quoted as a representative of your organisation or movement.

Look for quotes that support policymakers, academic experts, etc. Look key people up online. Find out who they work for, who funds that work and what the goals of that organisation or individual are. Keep in mind that most large corporations employ public relations companies to manage their communications. If you can, find out who they are. This will give you an insight into the "machine" you are challenging, and the personalities and power dynamics behind it.

Some corporations have invested in media analyses and commentary around contentious issues, such as GMOs. Most of this investment is confidential, yet it is worth conducting a quick online search to check. For example, the Wellcome Trust funds this blog on scientific issues under social debate. While these sources are funded by proponents of the dominant narrative, they can provide valuable insights and angles to explore when devising counter-narratives.

STEP 04: DRAW CONCLUSIONS

Time estimate: 1.5 days

CAPTURE YOUR RESULTS

Take time to assess the findings you have captured and look for trends across the categories above. If you have selected articles across different moments (for example, around a series of decision-making political meetings), you may identify changes in reporting styles or levels of bias over time.

In general terms, when an emerging issue or new technology starts to attract wider social debate, the media responds with a deeper level of questioning. Similarly, when an issue is under the political spotlight, media interest is heightened, and reporters are actively looking for fresh story angles. These moments represent key opportunities for intervention and influence by civil society because reporters are likely to listen more intently to alternate views — and be open to new angles or "leads" to investigate.

List which outlets and/or specific journalists are more aligned with your issue, and those who are not. Remember that media bias may be attributed to several reasons, not least being that many reporters may not have investigated their story thoroughly for lack of time, or may have been briefed by proponents of the dominant narrative. Consider whether some reporters may benefit from a media briefing event, or a 1:1 meeting.

ASSESS YOUR OWN COMMUNICATIONS

Look at your own media interventions to assess whether the key messages and language used to convey them supports your narrative stance, or inadvertently reinforces the dominant narrative. For example:

BIAS
Check whether your communications materials present the issue in a way that counters any bias. Be careful to avoid reinforcing the description of the dominant narrative in your counter-narratives — approach the story on your own terms.

QUOTES
Check whether the quotes attributed to your "spokespeople" could be adjusted to better address angles that are being ignored or misrepresented. Check the tone of your quotes. Think about the values your movement wants to portray, whether "trust" and "truth", or "expertise" and "insight", for example. Make sure all the quotes you use make your values clear to a reader. While emotion can be effective, keep in mind that many readers may not share your passion, so use emotive language carefully and ensure it does not obscure your key values.

LANGUAGE
Consider whether there are certain images, words, or tone you should avoid using, or certain words or phrases you should start using more. For example, some words are used inaccurately by media. Other words are promoted by the proponents of an issue or technology. Sometimes they use emotive metaphors to promote the need for a technology, or negative imagery to describe those who oppose it. Think about whether you could re-use their language in your own communications to redirect the negative connotations to describe the technology itself, for example.

STORYTELLING STYLES

Consider other styles of storytelling to counter misrepresentations, such as case studies. For example, a case study on how African small-scale farms provided food security for their communities during the COVID-19 pandemic might help disrupt narratives of need, used to justify the importation of controversial agricultural technologies. This story is being sidelined by some aid agencies because it doesn't fit the narrative agenda of their donors.

VOICE

People can be more receptive to messages when they are delivered by someone they trust, or identify with in some way. It is important that those most affected by an issue are the primary voice, but including other messengers can be a strategic way to reach different audiences. These can range from celebrities to academics with a good reputation in related fields. If they agree with your aims, and are willing to provide "third-party endorsement" of your messages through opinion editorials or interviews, their engagement can be a powerful way to increase your movement's reach and influence.

FOLLOWING THE MONEY

Assess whether there is value in publicising the power dynamics and funding behind a particular issue or technology.

STEP 05: IDENTIFY RECOMMENDATIONS

Time estimate: 1 day

1. Prioritise which actions will have the most impact for your movement, and which can be implemented effectively within your resources.
2. Draw up a plan of action and a timeline. Actions may include:
   A. A review of your messages and communications materials
   B. Interview training for your key "spokespeople"
   C. Organising a briefing event for (or 1:1 meetings with) influential reporters you think would benefit from the provision of more accurate facts and statistics, or from hearing your viewpoint
   D. Engaging with people who can provide third party endorsement to your messages, as experts or affected communities
   E. Fine tuning your list of media contacts, and building your relationship with influential reporters or outlets by responding quickly to interview requests and providing them with new story angles or useful background information. You may also consider offering a story exclusively to a trusted journalist on occasion.
   F. Revising your communications plans going forward to focus more on specific events that you found attracted significant media interest, and possibly hiring your own photographer so you can offer media outlets images of your protests at those events.

Present your findings and recommendations in your chosen format for sharing with colleagues, such as a PowerPoint presentation. You may wish to follow the analysis categories above when presenting your insights.

A GROWING CULTURE

etc
GROUP

vigilar al poder
monitorear la tecnología
fortalecer la diversidad