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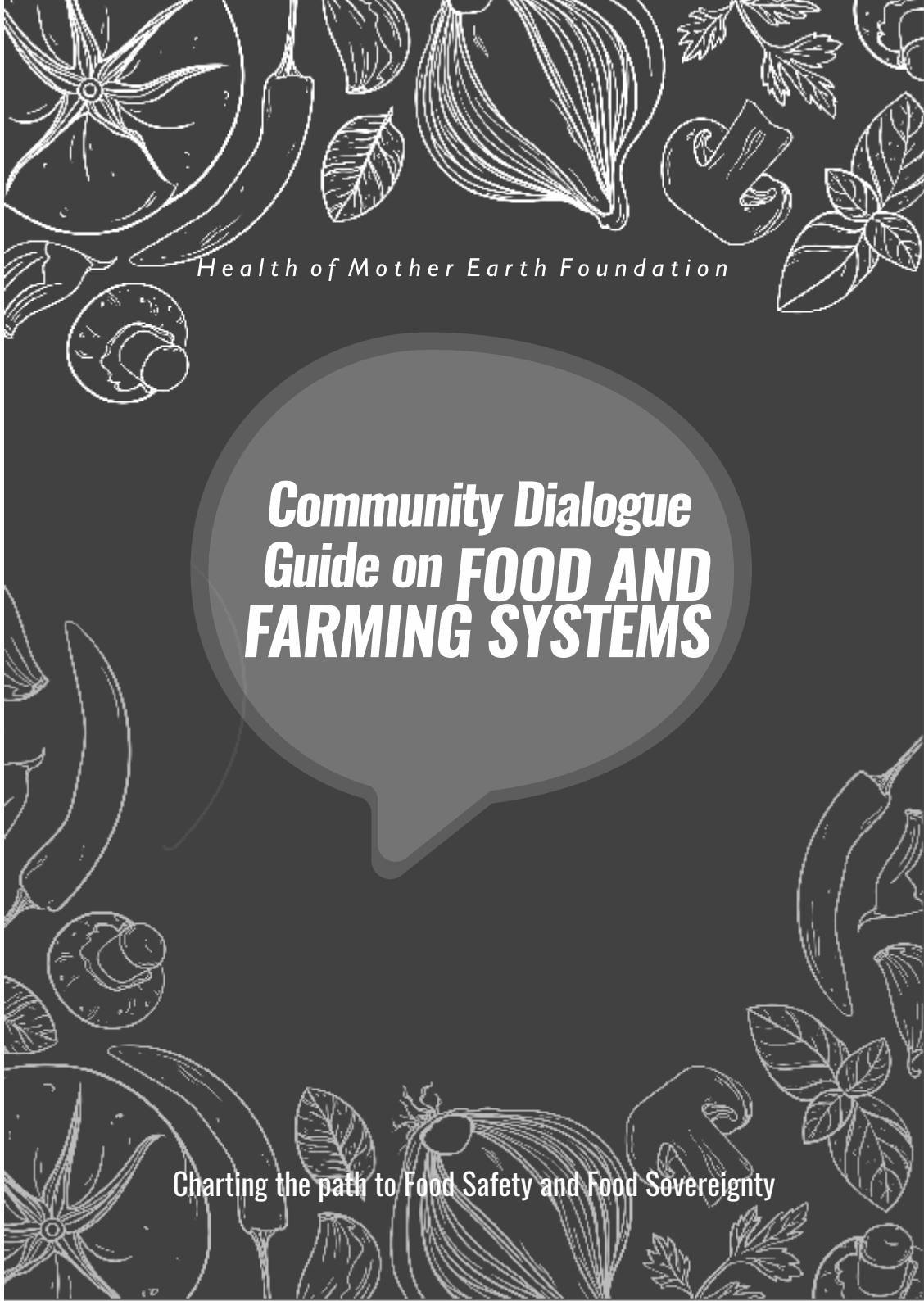
Health of Mother Earth Foundation

Community Dialogue Guide on FOOD AND FARMING SYSTEMS

Charting the path to Food Safety and Food Sovereignty


Health of Mother Earth Foundation
Community Dialogue Guide on FOOD AND FARMING SYSTEMS
Charting the path to Food Safety and Food Sovereignty

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Charting the path to Food Safety and Food Sovereignty

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About Our Community Dialogues

The HOMEF Community Dialogues (CDs) are diagnostic exercises that provide space for community members to review situation (environmental and agricultural) in their communities and to identify needed areas of action to preserve their heritage and achieve improved conditions.The CD can be for one community or a cluster of communities. Although the major focus is on rural communities, the CD is suitable for all communities irrespective of whether they are urban or rural. They would equally work for workplace, schools, and other specialized communities.

The CD is a two-step exercise:

A. Identify assets and concerns. Prioritize areas that need action

B. Acquire Knowledge /competence in ecological monitoring and defense (in this case defense of food systems and farmers' rights)

The Dialogues are driven by discussions on a series of issues relating to a particular area of concern and usually end with resolutions.

Participants are shared into groups of not more than 20-30 persons (depending on the total numbers). Each group nominates a note keeper and a facilitator. Facilitators keep strictly to time, while ensuring that the process is not rushed.
Before kicking off the CD it is vital that everyone understands the importance of the exercise.

Participants should own the process and see the questions and points raised as basically guiding suggestions.

Section One: Introduction

Food is central to our existence and access to adequate food is a basic human right (CESCR General Comment No. 12, 1999). Food Include edible crops, livestock, fish (covering all edible marine or freshwater species), foods hunted or gathered, and foods grown in urban and peri-urban environments.

It is expedient that we consider where our meals come from, who produces them, how they are produced and whether they are actually good for us.
The availability of food doesn't mean the access by all to it (food sovereignty) and even the access to it don't guarantee its safety. There are three key components of the right to food, namely food adequacy, availability and accessibility.

The United Nations' estimates that 795 million people are hungry – meaning they don't get enough calories or adequate nutrition from those calories. This means that 10% of the world's population is hungry.

It is also estimated that at least 3.9 billion of us (52%) suffer from malnutrition i.e., beyond those who are hungry in the traditional sense, there many more who have sufficient calories but are suffering, often severely, from nutritional deficits and damage (lack of micronutrients, vitamins or protein) or from the ill health caused by overconsumption of the wrong type of food.
It is a distressful irony that many small scale farmers and agricultural workers struggle with hunger and malnutrition even though they provide the bulk of the food in the world. Several factors threaten access to safe and appropriate food including waste, climate impacts, pests and disease invasion and pollution from oil exploration activities.

Attempts to overcome agricultural challenges have led to many innovations and have resulted in production of improved crop and livestock varieties (through natural process such as cross breeding and hybridization) suited to withstand environmental changes.
However, corporate industrial systems attempts to control food production and displace small scale farmers through the push for genetically modified crops in the guise of providing solutions for agricultural problems.

This on its own is a challenge to the future of food systems.
Small scale farmers are the main food providers to more than 70% of the world's people and they produce this food with less than 25% of the resources – including land, water, fossil fuels .The Industrial Food system however, uses at least 75% of the world's agricultural resources and is a major source of GHG emissions, but provides food to less than 30% of the world's people

Section Two: Questioning our food production. Between the Industrial chain and the Small Scale/Agroecology Farming (With Excerpts from 3rd Edition of ETC's *Who will Feed Us*)

Objective: Community members are to discuss in groups and identify the disparities between the industrial food system and small scale agriculture, identifying the disadvantages of the former.
The facilitator summarizes after the discussion.

1. **Where do most people get their food and who produces it?**
   Small scale farming not only feeds 70% of humanity, it also produces about 70% of the world's available food, in calories and weight.
   Most of the 800 million people worldwide depend on fishing or small-scale fisheries for their food and livelihood.
   Hundreds of millions more regularly turn to the small scale farmers in times of scarcity

2. **What happens to the food produced by the Industry Chain?**
   The industrial system of farming feeds less than 30% of the population. 44% of the crop calories are wasted in meat production, more than 50% of the crop calories are used as livestock feed, and only about 12% of those calories (or 6% of total calories) are then converted into food for people.
   Another 9% of the crops produced by the industrial system go to biofuels or other nonfood products. At least 15% of the calories are lost in transportation, storage and processing. About 8% of calories are wasted in households.
   This means 76% of the total calories are wasted before making it to the plate, and only 24% are eaten by people.

3. Who is using up our agricultural resources?

Small scale farmers use less than 25% of agricultural lands to grow the food that nourishes more than 70% of people. ETC estimates that they uses approximately10% of agriculture's fossil energy and no more than 20% of agriculture's total water demand with far less damage to soils and forests.

The industrial system however uses more than 75% of the world's agricultural land and in the process annually destroys 75 billion tonnes of top soil and controls the market environment that cuts down 7.5 million hectares of forest. Further, the industrial chain accounts for at least 90% of agriculture's fossil fuel use (and GHG emissions) and at least 80% of freshwater use, and leaves us with a bill of $12.37 trillion (for food and damages). It also leaves 3.9 billion people underfed or malnourished.

4. Who looks after livestock health?

Peasants and pastoralists breed and protect livestock that have enormous resilience and resistance (e.g. animal breeds that have immunity to diseases or tolerate extreme weather). Peasants often rely on indigenous ethno-veterinary practices that are built around local resources.

In the Industrial chain, livestock vulnerability has created a huge industry. The Chain, instead of using diverse, indigenous breeds, destroys indigenous poultry and pigs to protect their genetically-uniform breeds.

Despite bans, antibiotics are still used as livestock growth promoters. Antibiotic resistance costs the US $55 billion. Governments recognize that antibiotic resistance is a threat that may equal climate change.

5. Who safeguards our fisheries?

In Nigeria, about 9.5 million people are employed in the fishing business. This includes the fishers and the fish processors.

Worldwide, 800 million peasant fishers harvest 15,000 freshwater and 20,000 marine species. 90% of fish processing jobs are held by women who make a critical contribution to the nutrition of more than 3 billion people.

In the industrial system however, 40% of their marine catch is composed of 23 species. About 25% of the Chain's marine catch is illegal and unreported.

6. What is happening to food diversity?

6.1. Are there species of crops and animals (land and aquatic) that are no longer (readily) available in the community? Name them.

Peasant-led crop and livestock breeding promotes diversity for both food security and nutrition. Women, who do much of the seed selection and breeding, especially focus on improving nutrition, seed and food preservation, and cooking characteristics. Diversified agroecology farming is based on the maximization of synergies between species. For example, in Kenya, the push-pull mixing of maize and pasture for dairy has doubled the production of both milk and maize.

The industrial system promotes loss of biodiversity as focus is on cash crops and genetic modification of crops encourages single varieties and mono-cropping.

7. Who safeguards our soil?

Normally, small scale agriculture use manure, crop wastes and soil micro-organisms to fix 70–140 million tonnes of nitrogen p/a and improve soil fertility. Peasants have their own soil

In contrast, the industrial system is responsible for almost all of the 75 billion tonnes of soil lost p/a. The industrial system dominates more than 75% of global agricultural land, and uses most of the world's synthetic fertilizer.

8. **Who encourages cultural diversity?**
   Cultural values influence production, consumption and our respect for Earth. Indigenous Peoples discovered, protected or domesticated, and bred and nurtured every food species we use. While small scale agroecological farming sees cultural diversity (different ways of knowing) as inherent to agriculture and in ensuring environmental sustainability, the industrial system regards cultural diversity as an obstacle to market monopoly, by dismissing the thousands of diverse ways of relating to the Earth.

Section Three: Genetically Modified Organisms (GMOs) and their Implications

Objective: The group shares ideas and information about GMOs and their implications for our food system. Group members are allowed to share their thoughts and opinion. The facilitator summarizes afterwards.

1. **What are GMOs?**
   1.1. What do we know about these crops?
   Genetically Modified Organisms (GMOs) are products of genetic engineering which is a technology that allows scientists to create plants, animals and micro-organisms by manipulating genetic material at the cellular level in a ways that are not possible through natural breeding processes. It allows DNA from one type of organism (such as an animal) to be introduced into another unrelated organism (such as a plant).

2. **Why are crops genetically modified?**
   Crops are genetically modified for two major reasons: to act as pesticides and to withstand herbicide use.

3. **What is wrong with GMOs?**
   . Health risks: GMOs and their accompanying chemicals have been linked to several health defects and diseases. In 2015, the cancer research arm of the World Health Organisation (WHO) declared glyphosate (the main chemical ingredient of Roundup herbicide, which most GM crops are engineered to tolerate) a probable cancer causing agent.

Scientific research on GM foods have showed stunted growth, impaired immune systems, bleeding stomachs, abnormal and potentially precancerous cell growth in the intestines, impaired blood cell development, altered gene expression and cell metabolism, liver and kidney lesions, less developed organs, reduced digestive enzymes, higher blood sugar, higher offspring mortality. Etc.

. **Environmental risks:** GMOs present several risks to the environment including increased use and accumulation of toxic chemicals, soil degradation and destruction of biodiversity.
Also, GMOs have potential to contaminate natural varieties and will persist in nature for many years.

. **Economic disadvantage:** With GMOs, farmers cannot save and reuse seed. They would depend on corporate bodies to provide seed each year. This is because property rights are claimed on the modified seeds and thus farmers loose theirs. This is achieved through the terminator genes in the crops which would prevent them from growing if replanted. GMOs thrive with heavy inputs of chemical herbicides which are not affordable to majority of small scale farmers.

. **Challenge to diversity (Cultural and Biological):** GMOs encourage monocultures and thus reduces biological diversity that ensues with mixed cropping and cross breeding. In addition, indigenous knowledge and cultural preferences are overlooked as GMOs promise quick fixes with stereotype solutions.

4. Any advantages of GMOs? Do we need GMOs?

There are talks of crops being engineered to offer higher nutrition values or to withstand harsh weather patterns. However, there are native species that already perform these functions.

5. Can GMOs be identified? How?

5.1. How are GMOs different from hybrids?
Phenotypically, we cannot identify GMOs. They may look the same as the natural varieties. The crops are modified at their cellular/genetic level.

Crops varieties may be cross pollinated however to produce an offspring with desirable traits in the parent crops-hybrid. This type of combination is different from the processes of genetic modification in which genes are transferred across species and which presents various short term and long term risks.

6. Would you eat or plant a GM crop if you could recognize it?

Even the producers and major promoters of GMOs do not consume them. It is the average man who knows little or nothing about them that would suffer.

Section Four: Agricultural Challenges in Nigeria.

Objective: The group members identify and discuss the various challenges they encounter with farming in their locality.

The facilitator notes down these challenges which will be presented at the plenary session.

A. Are there species of crops that have gone extinct?
B. Are there animal species that have gone extinct? What may be the cause?
C. What methods of farming are we employing? What has changed? Why?
D. Are the farming methods that are harmful to the soil but are still employed? Mention them.
E. How does your farming community preserve resources e.g. seed?
F. How are cultural teachings and traditional knowledge preserved through the years??
G. What are the major challenges with farming now?
H. Are there challenges with availability of land, water, seeds?
I. What are the challenges with markets, roads?
J. Are there challenges with manpower or infrastructure?

Section 5: Way forward/Actions

In this section, participants identify action areas to place the communities and the nation at large on the path to food safety and food sovereignty.

What is to be done?

. Summarise the key challenges with food production in the country
. Outline the solutions to those problems
. What can the farmers do to improve the situation?
. What can the government do?
. What can non-governmental organizations help with?
. Are there issues that require legal action? What are they?

Section Six: Bringing it all together

Objective: In this section participants reconvene in plenary and each group presents responses gathered from the dialogue. From these presentations, the responses are mapped and synthesized into resolutions.

What to do with the outcome:
Share with stakeholders
· Utilize aspects for advocacy
· Introduce the GMO-free Nigeria Alliance
· Agree on next steps.

About HOMEF

HOMEF is the ecological think tank and advocacy organization registered in Nigeria. Nigeria is our base but Africa is our focus. HOMEF works to bridge the yawning gap between policy/ decisions made by government and the actual needs at the grassroots.

HOMEF works with local communities to build and share knowledge. We recognize that current global crisis have systematic roots and the prevalent paradigms of development and growth based on competition will lead to critical destruction of biodiversity and continued destructive extraction of natural resources as well as dependency on risky technologies. In all these concerns of grassroots communities are ignored, repressed or exploited. We work to build solidarity and ensure justice.

Our Core Values:
Justice& Equity in all circumstances, People and the planet in harmony and free from exploitation, Dignity (Respect), Action (Solidarity), Knowledge

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Other Publications of HOMEF

include

1. Eco-Instigator (quarterly journal)
2. Defending our Biological Diversity
3. To Mint an Illusion
4. Community Guide to Environmental Monitoring
5. Community Dialogue(Oil/Gas)
6. Community Dialogue (Forest)
7. Oil Politics-Echoes of Ecological Wars by Nnimmo Bassey
8. Oil, Power and a Sign of Hope

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