



About M. Jahi Chappell

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About IATP

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Contribution to Africa Regional Meeting on Agroecology

Supporting communities and building healthy soil through investment in and accountability to local communities

MINNEAPOLIS, NOVEMBER 17, 2015 —Agroecology has been growing on national and international agendas, ranging from the 2012 decree on agroecology of Brazilian President Dilma Rousseff, to the United Kingdom's All-Party Parliamentary Group on Agroecology, to the 2014 International Symposium on Agroecology for Food Security and Nutrition held by the FAO and subsequent regional meetings. This growing prominence reflects the important roles of both science and civil society in addressing the challenges facing us and that extend across borders—challenges such as climate change, environmental degradation and continued hunger and poverty. Agroecology is unique in its increasing incorporation of science, practices and movements, bringing together three vital parts of social and environmental change for the better.

As a science, agroecology draws together the disciplines of agronomy, horticulture and ecology, along with social sciences such as economics and sociology. The term dates back to at least 1928, around 50 years after the term “ecology” itself was coined. It can be thought of as the application of ecological science to inform agricultural practice, along with the use of social sciences to understand the dynamics that have led to current sets of agricultural practice; the evolution and context of functional traditional knowledge and practices; and the socioeconomic and political dynamics of producers' efforts, livelihoods and contributions. The *practice* element of agroecology translates ecological knowledge into agricultural practice, as well as observing and learning the costs and benefits of current practices. Finally, agroecology as a *movement* is important because a system of agriculture which takes into account larger environmental costs and threats like climate change will require the re-organization of a number of social institutions. Social movements and civil society are undeniably an important element of such a re-organization, and hence can be said to be part of agroecology. Further, social movements offer a logical point of articulation for

agroecology's focus on acknowledging and supporting farmers' leadership, knowledge and local contexts. Lastly, as a practical note, movements can be thought of as a vital part of agroecology given that effective articulations between farmers and scientists will require politics of inclusion and community empowerment.¹

DISCUSSION POINTS

There is strong support in the relevant literature for the most important factors in supporting food security, good farmer livelihoods, productivity and effective environmental management (e.g. for climate change mitigation and adaptation). Although no factor can guarantee success, the factors at the center of each of our key points are associated with higher probabilities of success. Further, these factors are either part of existing agroecology discourse or are compatible with it, especially if agroecology is paired with the concept of food sovereignty, the rights and resources for each community to determine its own food system.

Key point 1: To reduce hunger, fight climate change and increase sustainability, empirical research emphasizes the key importance of community well-being and public goods.

Agroecology supports, and in turn is supported by, these factors.

A significant part of the current conversations around food security and climate change has focused on production and productivity to meet present and future needs. While this can make important contributions to solving these problems, more and more scholars and community members are observing that it is not sufficient. As one recent peer-reviewed paper states, “there are a series of filters that determine the extent to which intensification is sustainable and contributes to greater food security... unless it meets the demands of both distributive and procedural justice, increased food production cannot be described as sustainable”.²

To this point, an important observation is the sizeable impact public goods make on improving food security and health measures (and these in turn support social capacity for mitigation and adaptation).³ To quote a recent, broad-based and very thorough expert analysis:

For Sub-Saharan Africa [...] empirical results point to access to sanitation, women's education, and gender equality as key priority areas... [N]ational food availability does not feature near the top of the priorities for accelerating undernutrition reductions in either South Asia or Sub-Saharan Africa. This does not reduce the importance of maintaining adequate food supplies, including food production, but simply acknowledges that the scope for it to reduce stunting prevalences is lower than that of the priority underlying determinants we have identified.⁴

While their results merit careful consideration and there is room for discussion around priority measures, the observation that public goods are strong—and perhaps the strongest—levers for increasing food security is a powerful and important insight.

Further, improvements in each of these priority areas would also be likely to increase the community-level autonomy, capacity, and sovereignty, as well as improve agricultural productivity. Pertinent to this meeting, each of these priority areas can also gain from, and contribute to successful agroecological initiatives. One key challenge will be the possibility, mentioned above, that addressing some priority areas—for example, increasing productivity—will not be effective unless other priority areas are addressed simultaneously.⁵ This may add additional challenges and complexity to creating successful interventions.

Overlap with agroecology

The methods of agroecology require a combination of farmer leadership and knowledge with modern ecological science, meaning that support for education and two-way communication between farming communities and supporting governments and NGOs has been repeatedly seen as a key element of successful agroecological projects. In turn, certain agroecological approaches can provide numerous benefits to communities through conservation and maintenance of ecosystem functions, many of which are under-valued and/or non-market functions.⁶ According to one recent review, examples of functions provided by more diverse agricultural systems⁷ include greater carbon sequestration; greater retention of nutrients; and a greater ability to resist and recover from various forms of stress, including herbivorous pests, diseases, droughts and floods.

It will likely be important to consider and discuss which agroecological approaches may best provide different benefits, such as the potential to mitigate climate change⁸ and increase resilience.⁹ This should be considered alongside participatory evaluation of which practices are the most accessible or locally suitable according to community desires, preferences and near-term capacity. Towards this end, we would note that: (a) particularly in agroecological systems, best practices raise productivity significantly¹⁰ (which reinforces the potential and importance of participatory research and education); and that (b) rural education, particularly when it increases access and achievement by women, usually both reduces malnutrition¹¹ and increases productivity.¹²

Re-emphasizing Gender

Agroecology has a strong and growing focus on women's rights and gender equality,¹³ a focus that is being continually strengthened by the concept and commitments of food sovereignty¹⁴ and the related agroecology and food sovereignty movement.¹⁵ Issues of gender are naturally complex and locally-specific, and may need different approaches even within the same small community. Therefore, addressing gender is not well-suited to the use of automatic processes and is likely best served by adaptive, specific, locally-suited and participatory approaches.¹⁶ Also, although there are many probable benefits to women, men, children and agriculture when gender inequality is dealt with in an effective manner,¹⁷ careful consideration and deliberation is important so that an emphasis on fulfilling women's potential does not lose sight of their rights or place additional disproportionate burdens on them to support and improve community development:

While recognizing the power of women to lift their families and communities out of poverty, women are not simply instruments for hunger reduction. Women must be empowered and recognized as equal partners—valued for their contributions and knowledge—not because they deliver results but because they are equal with men.¹⁸

Key point 2: Evidence implies that improving and maintaining food sovereignty, autonomy and political agency are important levers to support improvements in food security, resilience and sustainability.

Collaborative political empowerment and mutual accountability between communities and regional and national governments are necessary to achieve the potential of agroecology.

A common but often under-emphasized observation is that food insecurity and agrifood system unsustainability represent market failures. In fact, the presence of food security is a public good that will not be provided in sufficient amounts by markets without government intervention and contemporary agrifood systems generate numerous negative externalities such that “business efficiency is not the same as social efficiency.”¹⁹ In other words, it is likely that food security will be under-provided by free markets, and negative externalities will exact costs on society that are not reflected in prices and therefore will not be efficiently or effectively managed without public intervention designed by and with local communities and governments. (It practically goes without saying, but decades of research in environmental justice and political ecology have shown as well that unsustainability and food insecurity are likely to be exacerbated by inequality—marginalized and poorer communities will receive even less public goods and suffer from more “negative externalities” than is proportionate or just.)

There are many proposals on how to best deal with the problems embodied by these externalities and inequalities. One very strong vein of research and practice towards this end has focused on empowerment and collaboration with local communities: decentralization *along with a significant degree of devolution of resources and decision-making authority*. Economics Nobel Prize

winner Elinor Ostrom used both theory and field research to validate the proposition that greater autonomy for local communities improves the likelihood that they will create and maintain governance institutions that can sustainably govern scarce resources over prolonged periods.²⁰ Numerous political scientists have similarly written on the importance, track record and potential of strong, well-supported and empowering local governance,²¹ polycentricity and subsidiarity (strong local governance backed by governance structures at other scales).²² Beyond the cases presented by these researchers, others have made similar observations specifically in regards to decentralization and local empowerment in successful agricultural extension,²³ nutrition,²⁴ and conservation of forests.²⁵

In fact, a common roadblock seen in successful implementation of agroecology projects is very much in line with one of the observed challenges to better conservation outcomes in community forestry: insufficient support and empowerment of local communities and too much privilege and control afforded to “expert” voices.²⁶ And of course, focused empowerment and involvement of women and girls has been shown to improve multiple outcomes in terms of improving individual and community well-being, both ecologically²⁷ and socially.²⁸

A key element of successful projects seen across these works is the effective efforts towards truly open and transparent participation by local populations²⁹—which, when the local population is a historically marginalized one, is likely to require substantial public investment and collaboratively-tailored support, particularly from regional and national governments, in order to create and maintain the capacity to participate in the first place.³⁰ Although support from other actors (such as donors and international NGOs) can lend additional help, accountability has been empirically observed to be important as a feedback mechanism and way to increase the likelihood of success, underlining the importance of responsive and adaptive governmental support. In particular, an important observation for consideration is that of Karnani (2010), who argues that “Corporate Social Responsibility” is conceptually and empirically ill-suited for providing public goods and cannot replace government action. This should be a careful part of the evaluation of the possible impact and viability, for example, of Private–Public Partnerships (PPP), which may have limited potential to improve food security, production and sustainability for marginalized communities.

It is worth noting that in addition to the empirical research cited previously, and theory-building by Ostrom and others, Farrell and Shalizi³¹ have recently synthesized research across economics, psychology, political science and network theory to propose that problem-solving is greatly aided by (among other items) a higher degree of substantive equality among actors and the ability of dissenting minority voices to be heard and for their points to be given serious consideration. While providing the space for this in the context of the significant levels of inequality experienced by marginalized communities is a difficult challenge, deeply participatory models have shown promise and a number of cases of success,³² including in Africa.³³

Food sovereignty

Given the above points, food sovereignty is an important framework to consider in the design and implementation of interventions to improve food security, resilience and sustainability. The concept of food sovereignty can be thought of, on the one hand, as an expression of the human right to self-determination and additionally, on a more functional level, to be an empirically-backed concept that may improve the realization of the right to food alongside sustainability objectives. That is, the elements of participation, autonomy and empowerment at the level of local communities are strong enabling factors and align with the normative principles and movement elements of agroecology, which has often been closely identified with food sovereignty.³⁴ Food sovereignty in fact includes priorities of local-scale empowerment and collaboration and originated 20 years ago in part to address the need for rights-, equity-, and policy-based approaches to food production and consumption. Akram-Lodhi has described its basic pillars as: (1.) a focus on food for people; (2.) the valuing of food providers; (3.) localization of food systems; (4.) the [broad-based] building of skills; and (5.) working with nature [ecosystems and ecological knowledge].³⁵ Thus, although many challenges and questions remain, it can be said that the theoretical and empirical evidence for the importance and potential of food sovereignty is large, growing and strong.³⁶

Key point 3: From healthy, empowered people to healthy, rich soils.

Though connections between sociocultural factors and empowerment, on the one hand, and soil health and climate change mitigation on the other, can be difficult to understand, they are increasingly well-documented.

The Soils, Food and Healthy Communities (SFHC) project in Ekwendeni, northern Malawi works with over 4000 farmers in a participatory project where farmers use agroecological methods in a deeply collaborative process to improve soil fertility, food security and nutrition.³⁷ This collaboration between researchers and the farmer-led Farmer Research Teams (whose members are voted in, and which is composed of over 50 percent women)³⁸ has led to improvements in child nutrition,³⁹ increased crop and dietary diversity,⁴⁰ more stable yields with reductions in the need for synthetic fertilizer, increased profitability and a trend towards greater soil organic carbon and fertility.⁴¹ Three researchers involved in the project described the project as “focused on dialogue and problem-solving and [drawing] on local concepts of traditional leadership and knowledge to foster change... [with] attention to particular inequalities such as those experienced by youth or people infected with HIV/AIDS.”⁴² The SFHC’s use of an Ecohealth conceptual framework⁴³ reinforces the important connections between social, ecological and nutritional factors. Further, communities who are empowered with the rights and resources to govern their local environment are more likely to manage it sustainably⁴⁴ (as discussed previously), and participatory analyses and approaches appear to practically be a prerequisite to successful agroecological interventions for small-scale farmers.⁴⁵ Correspondingly, healthy soil in well-managed diversified agroecosystems will be better suited to support empowered communities able to exercise autonomy and engage in deliberative decision-making and knowledge co-creation.

BASED ON THE ABOVE KEY POINTS, WE HAVE THE FOLLOWING RECOMMENDATIONS.

RECOMMENDATION 1. Interventions to improve food security, productivity and sustainability should recognize the importance of communities’ basic rights, including food sovereignty, and thus must truly and directly involve them in participatory decision-making on the types of and approaches to appropriate interventions.

RECOMMENDATION 2. Correspondingly, interventions to improve food security, productivity and sustainability will often require the improvement and maintenance of basic public goods (especially clean water, sanitation, and education) in the context of participatory processes with local communities.

- *Specific case:* Recognize that knowledge and innovation are public goods, and thus intellectual property must be handled in careful, locally-tailored ways that recognize and support the existence and sharing of traditional knowledge. Recognize that contemporary and mainstream “one size fits all” approaches may in fact do more harm than good.⁴⁶

RECOMMENDATION 3. Fostering social equality—particularly, but not exclusively, along the lines of gender—is a vital element to properly implementing agroecological approaches and will powerfully support the effectiveness of any effort. But, as with all other elements, this must be done with collaboration and methods appropriate to the local context.

RECOMMENDATION 4. Experts specifically (e.g., policymakers, administrators and researchers) will need to use approaches that increase the effective voices of communities and support increased equality between and among actors in order to achieve the best results. These approaches should be based on established and innovative participatory methodologies that can be found throughout peer-reviewed literature and “gray literature” reports.

RECOMMENDATION 5. Private-Public Partnerships (and related approaches) should be evaluated very carefully, given that provision of public goods is by definition an area where government action cannot be replaced and will not be sufficiently provided by private interests. This type of approach may not be well-suited to appropriate interventions for food security and sustainability, where significant (positive and negative) externalities are likely to be present and of significant size.

RECOMMENDATION 6. A socio-ecological approach must be taken, involving local community members as well as social and natural scientists (keeping the previous point in mind), in order to best implement agroecological practices to improve food security, sustainability and resilience.

RECOMMENDATION 7. Use direct deliberation between experts/government officials and community members in order to generate mutual accountability. That is, those giving resource support for the intervention need to respect the deliberation of the community and support modes based on procedural justice. In turn, effective and empowering community participation is more likely to generate mutual accountability between supporters and community members.

RECOMMENDATION 8. Successfully implementing agroecology and food sovereignty-focused approaches are highly likely to require removing existing policy barriers and implementing appropriate policy supports—for example, improving the accounting and internalization of negative externalities and improving the knowledge of and support for positive externalities. Further, multiple avenues to improved social well-being should be considered, including consideration of the *variety* of markets agricultural producers may produce for, including local and regional markets, as well as effective increases in income through increased self-provisioning. The diversity of production and markets that can support improvements in food security, resilience and sustainability is not necessarily well-served by a prioritization of international markets or commodity crops.

Endnotes

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