**MARIS NETWORK**

Migration, Agriculture and Resilience: Initiative for Sustainability

MARIS is a network of researchers and practitioners with a common interest in putting migration at the forefront of the global agricultural research agenda. The network is oriented to sharing ideas data on the relationship between migration, agriculture and ecosystems in an era of economic, environmental and climatic change – and contributing to policy and political dialogue.

**Background**

Migration is one of the most challenging policy issues facing the world in the 21st century. According to UNFPA, 244 million people live outside their country of birth worldwide. The FAO also estimates that there are a staggering 740 million internal migrants worldwide. Together this accounts for around 13% of the world’s population – and the impact on sending and receiving communities have been unprecedented. A significant proportion of this migration is for work, and in developing countries, remittances are estimated to have risen from $29 billion in 1990 to over $441 billion in 2015 – close to three times what is received in development aid (World Bank, 2016).

Migration is an important topic in development research, with significant attention paid to issues such as integration of migrants in host communities, labour rights and the migration process. However, it is also important not to overlook the livelihoods of those who stay behind. This is a particularly important question in the context of labour migration today, which is rising at an unprecedented rate in the Majority World. Unlike the great labour migrations of the Industrial Revolution, it is common for only some members of a family to migrate and these migrants retain binding ties to their home villages, returning periodically. They maintain financial links with the land and the rest of the family at home.

In this context, there is growing interest in the impact of migration on the family members who do not migrate and remain in agriculture. For example, a large number of macro level studies have pointed to a significant drop in the...
levels of poverty due to remittance in flows to migrant sending regions (Adams and Page, 2005, Ratha, 2013, Giuliano and Ruiz-Arranz, 2009). Studies from the grassroots however, have shown that migration can also have complex outcomes in sending regions, particularly on the agrarian livelihoods for those who stay behind. For example, research has shown how migration can transform gender relations, improving women’s financial empowerment, while also adding to their work burden (Adhikari and Hobley, 2011, Hadi, 2001, Sugden et al., 2016). Other challenges include gendered constraints in accessing resources for climate change adaptation (Zahur, 2009, Sugden et al., 2014b, Sugden et al., 2014a).

Thus far however, research on agricultural development and resilience has remained somewhat separate from scholarship on migration – and there is a strong need to bring these two strands of research together. A series of policy dialogues hosted by The International Water Management in 2015-16, in collaboration with the CGIAR program on Water Land and Ecosystems (WLE), engaged with the issue of migration from an agricultural research standpoint. These dialogues highlighted firstly, the need to better understand the role of the agro-ecological context in mediating migration flows. Secondly, they sought more nuanced insights into what migration means for the agricultural livelihoods of farmers who stay behind – including not only their broader wellbeing, but their agricultural decision making, investment decisions, and resilience – and what this means for the management of natural resources and ecosystems. The dialogue also sought to understand migration as both a challenge and opportunity within the broader trajectory of agricultural development.

Against this backdrop, the MARIS network (Migration, Agriculture and Resilience: Initiative for Sustainability) was founded in late 2016 at a meeting of stakeholders from across Asia in Guangzhou China, hosted by South China Agricultural University, The International Water Management Institute (IWMI) and Stockholm Environment Institute.

Aims of the network
MARIS is an informal network of researchers and practitioners with an interest in better understanding the two-way interactions between migration, agricultural livelihoods and natural resource management.

The aims of the network are twofold. Firstly, it seeks to place migration as a key issue in the agricultural research agenda. Sustainable Development Goal 2 endeavours to end hunger, achieve food security and improved nutrition and promote sustainable agriculture. While this has been a core driving force for agricultural research seeking paths to ‘sustainable intensification’ of farming, the role of migration in affecting the success of achieving these goals has been overlooked. The exponential rise in out-migration during the 1990s has had an unprecedented impact on the agricultural sector. Changing gender roles for example, has implications for how agricultural support should be targeted. A lack of sensitivity to these transformations can even lead to the failure of agricultural and irrigation interventions (WLE, 2017). Another pressing issue relates to the role of youth in farming – a question which has implications for future food security. Across the majority world, the younger generation is aspiring for livelihoods outside of farming (White, 2012). This change is intertwined with the emerging migration economy, which is drawing youth out of agriculture.

The second aim of the network is to develop a research agenda on migration, agriculture and resilience. This includes opening up opportunities for research collaboration to better unpack the dynamic relationship between climatic, ecological and water stress and migration, while supporting the identification of solutions both in policy and practice that help address the drivers of migration and support better development outcomes for those who stay behind. There are a number of research questions which provide useful entry points for the network, and have been developed over the last 2 years of dialogue. Some of these questions are outlined below:

1) Remittances and agriculture. While the ‘positive’ economic impact of remittances has been widely cited in migration literature, there are unanswered questions regarding the degree to which they can be a
positive driver of change in agriculture. Past research has shown a preponderance for funds to be allocated in the non-productive sphere (luxuries), to meet basic subsistence needs (Sugden et al., 2016). How does one understand investment decisions, under conditions are remittances re-invested in irrigation, equipment and other inputs necessary for sustainable intensification? How are remittance flows mediating shifts in local agrarian inequalities, such as those rooted in land tenure and access to water? While migration can induce significant labour shortages, can remittances be used to purchase labour saving equipment to offset these stresses?

2) **Migration, climate change and agrarian stress:** Climate change and the associated water scarcity is an important driver of migration, although it is necessary to move beyond functionalist explanations whereby migration is a direct consequence of climate change and its impact on agrarian livelihoods and take a more nuanced approach. This was a key finding of a UK Government Office for Science commissioned report in 2011 (Black et al., 2017). IWMI research from South Asia has shown how migration is driven by a combination of climatic and political-economic stress including rising costs of living and farm inputs, an energy crisis in irrigation and a poor terms of trade for agriculture. Understanding the nuances behind the decision to leave agriculture is a key priority. It is also useful to understand what migration means for adaptation to climate change or other environmental stresses. For example, in the context of feminization of agriculture due to migration, it is useful to develop a link between migration research and established work on the gendered barriers to adopting climate smart technologies (Sugden et al., 2014a, Sultana, 2014, WEDO, 2008, Zahur, 2009). Migration can cause new vulnerabilities for those who stay behind.

3) **Migration and agricultural knowledge systems:** Migration and the associated change in gender and generational roles can result in a shift in the knowledge landscape within farming communities. The reduced labour contributions of young people can result in declines in agro-ecological knowledge acquired through work (Sugden and Punch, 2016, Katz, 1991). How does this affect agriculture and natural resource management when and if they return to the land? Conversely, can migrants bring new knowledge and skills (e.g. entrepreneurship) which can be mobilised productively in agriculture and natural resource management? Who are the appropriate actors for agricultural line agencies to target at a local level concerning agro-ecological knowledge development? There has been an important shift in gender and generational roles, and does this create a need to reorient agricultural extension services? In a similar vein, the desire to pursue a formal education is often interconnected with patterns of migration. Youth may migrate to study and work part time; or migrants may use remittances to invest in their children's education, in the hope that when they migrate they can receive better work. Are there ways in which formal education can be made more relevant for agrarian livelihoods when and if they return?

4) **Migration and inequality/ies:** It is not well understood as to whether migration reduces or intensifies inequalities. There are several issues at play. Firstly, while migration of family members may increase the bargaining power of marginalized farmers and enhance their access to cash, it can also intensify the divergence in the distribution of assets between less and more successful families with migrants. Questions include, what new forms of differentiation emerge between different sizes of farmers and social groups as a result of migration? What does migration mean for pre-existing, power laden agrarian relations such as that between landlords and tenants, creditors and debtors, rich farmers and poor farmers. Secondly, the feminisation of agriculture can also create new patterns of vulnerability for women who stay behind (Sugden et al., 2014a, Adhikari and Hobley, 2011), even if it increases their decision making power and control over assets within the household. Finally, there are questions related to whether migration causes changes in land use, including access and rights regimes for common property resources.
Activities of the network
The primary aim of the network is to link up practitioners and researchers in different regions of the world who are working in the agricultural field, yet have an interest in migration. The network will be free to join, and anyone can become a member on request. The network will include:

- A website, which can be a repository of research outputs by network members
- A mailing list for the sharing of new research outputs, calls for papers, and funding opportunities amongst members
- A directory of members, which is online, including their research interests
- Hosting of at least one annual event or workshop per year
References


