Women Farmers' Rights in the digital age: Some critical concerns
Inputs from IT for Change to MAKAAM’s Charter of Demands for Women Farmers
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1. Why is the ICT agenda relevant to the struggle for women farmers' rights?

The digitalisation of public service delivery has effected a paradigmatic shift in governance. This note discusses 2 aspects of this shift pertinent to women farmers:
– 'E-agriculture' initiatives
– New challenges to women's citizenship arising on account of the reconstitution of governance systems by Internet and ICTs

2. Digital efforts of government in agriculture: How can we further women farmers' agenda?

The digital efforts of government in the agricultural sector has largely focused on the following areas:
1. Digitalisation of service delivery in central and state-level agricultural departments
2. Using ICT channels to strengthen agricultural extension services. This includes multiple ICT channels such as web portals, touch screen kiosks, and mobile value added info-services; and building price information networks to strengthen market linkages of farmers.

These efforts are over a decade old, as they commenced with the launch of the e-agriculture Mission Mode Project of the National e-governance Plan in 2006. They have also received a fresh impetus under the Digital India programme, as part of the 'Technology for Farmers' track\(^1\) of the e-Kranti/ e-service delivery pillar. As part of this, facilities for online ordering of inputs and mobile banking for availing loans and relief payments are planned to be set up. In addition, real time information networks for farmers are planned to be strengthened. However, e-agriculture initiatives in their current form are not gender-inclusive, as discussed below,

2.1 Reduced emphasis on targeted agricultural extension services and welfare schemes for women farmers
In the past decade, there has been a shift away from targeted agri-extension efforts such as the Women and Youth Training Programmes that were supported by some states such as Karnataka. In fact, the launch of new-age agri-extension initiatives such as ATMA has coincided with a move towards generic extension programmes. Also, women-only schemes and programmes are scarce. In fact, even the Mahila Kisan Sashaktikaran Pariyojana set up under the National Rural Livelihoods Mission is present only in a limited number of blocks in the country. This extends to e-agricultural initiatives as well, and they tend to be gender-blind in design.

2.2 Overemphasis on virtual over hybrid models in the design of ICT-enabled agri-extension services
On-ground experience testifies to the fact that the most successful ICT-enabled agri-extension models are the ones that club digital information channels with traditional infomediary-based extension methods\(^2\). Such models include projects of non profit organisations like the 'Digital Green' initiative,\(^2\)

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1. [http://www.digitalindia.gov.in/content/technology-farmers-0](http://www.digitalindia.gov.in/content/technology-farmers-0)
state government-led pilots such as the e-Arik village centres run by the Krishi Vigyan Kendras in Arunachal Pradesh3 and initiatives led by academia such as the e-Sagu ICT-enabled pest control advisory service run by IIIT in Kurnool district of Andhra Pradesh4. However, the government's focus in this area has remained limited to pushing for the development of completely virtual models for agri-extension services. There has been no attempt to scale up hybrid agri-extension models, despite the wealth of evidence. The 'Farmer Portal' highlights the adverse implications of this policy choice for the gender inclusion agenda, as detailed below.

Farmer Portal

The Farmer Portal is an effort to create “(sic) a one stop shop for meeting all informational needs relating to agriculture, animal husbandry and fisheries sectors production, sale/storage...(for) an Indian farmer... With this Indian Farmer will not be required to sift through maze of websites created for specific purposes (sic)”. The portal brings together over 800 websites of various departments and organisations related to agriculture and allied sectors from the state and central government. At present, the beta versions of the portal can be accessed in English and Hindi. The portal is planned to be translated into other local languages as well.

The Portal has some sound design features:
(a) Information on specific technical aspects of agriculture, horticulture, animal husbandry and fisheries has been organised according to geographic regions, enabling a visitor to access the information for her specific village/block by navigating on a map.
(b) Information on specific government schemes and programmes has been organised using a two-way menu – theme-wise/ technical-aspect wise; and by scheme-name.
(c) Links have been provided to relevant external websites such as the Kisan Knowledge Management System and Kisan Call Centres; the pan-Indian AgMARKNET price information web service covering over 350 commodities and 2000 + markets; the site of the Department of Agriculture, Cooperation and Farmers' Welfare; and the mKisan service.
(d) Audio-visual content is being added for each area, considering the fact that the bulk of the intended users may not be comfortable with textually dense content.

As many of the portal's pages are still under construction, it is difficult to analyse in detail the effectiveness of the messaging, the attention to local dialects in discussing technical issues etc. However, even in these early stages, some design limitations are apparent.

(a) The default user is assumed to be a landed, male farmer – with no effort put in to highlight issues of land rights, schemes for landless, or benefits for women farmers. If the portal has to become inclusive, this must be rectified. This is also closely linked to the demands of women farmer groups for broadening the operational definition of farmers in agricultural policy and programme frameworks, especially ensuring the recognition of landless women working on others' lands as farmers.

(b) In the Indian context where 81% of women in the farm sector are dalit and adivasis, it is important to recognise that the Farmer Portal can reach these women only if women's access is facilitated by infomediaries/ agri-extension workers at the last mile. It is this lack of attention to taking the Farmer

3 http://www.agnicolturesnetwork.org/magazines/india/education-for-change/e-arik-center
4 http://www.thehindu.com/todays-paper/tp-national/tp-andhrapradesh/esagu-gives-taste-of-it-to-farmers/article4355629.ece
Portal to users by combining its use with traditional face to face extension processes and methods that becomes its biggest limitation in reaching out to marginalised women.

2.3. Ensuring women farmers’ inclusion in governmental agricultural service delivery systems: More than information access

It is well recognised that marginal women farmers, especially those engaged in farm labour on other people’s lands and forest-produce gatherers, are extremely disadvantaged when it comes to accessing formal agricultural service delivery mechanisms and informational channels of departments and agro-universities. The loss of a day’s labour in accessing agencies at the block level, social controls on mobility, intimidation in processing entitlement applications at official channels – all of these act as barriers to information access. The mobile phone seems to offer the promise of overcoming some of these barriers, and this is the thinking that guided the launch of the mKisan mobile portal in 2013.

However, as the following analysis of the mKisan portal reveals, access to information, in and of itself, cannot ensure effective claims-making. For this to happen, individuals and groups must be assured of adequate support that enables them to act upon the information they receive, and fall back upon, when they encounter specific barriers. Mobile info-services can bring gains for marginal women farmers only if they are tied to a process where access to schemes and services, and other expert institutions and agricultural advisers is facilitated through an on-ground support structure.

mKisan portal (http://mkisan.gov.in/)
This portal unifies all mobile based services offered by the state for farmers, on a single platform – Pull and Push SMS, IVRS and Unstructured Supplementary Service Data format services. In addition to these non-Internet based services, the mKisan portal also offers mobile apps for download for smartphone users. These mobile services focus on enabling 2-way interactions between farmers and agro-experts/ advisers.

Farmers can subscribe to mobile broadcast services pertaining to specific crops/ agricultural requirements; and they can also seek responses to specific queries through pull services. The push services (such as Push SMS and IVR broadcasts) are free of cost; and the rates of the Pull SMS vary between 0.60 to 1.00 INR based on the mobile service provider the individual user has subscribed to. The SMS services are available in 15 Indian languages – in Indian language fonts as well as Roman fonts. Farmers can subscribe/ sign up for these services through the web portal, from their own mobiles and by placing a request at Kisan Call Centres. In order to enhance outreach, the portal is attempting to tie up with state universities, Krushi Vigyan Kendras etc. to integrate existing farmer databases.

However, the portal has some shortcomings:

– Most informational services offered on the platform pertain to technical problem-solving and not about entitlements.
– Mobile app users have an edge over non smart phone users when it comes to accessing price information networks. The Digital Mandi app which provides a daily update of crop prices in leading markets across the country does not seem to have an SMS equivalent.
– There has not been enough attention to connecting the mobile services to an entitlement facilitation
mechanism on the ground, especially for marginal farmers. 
– Information and knowledge creation is seen as an expert-driven process with the farmer's role being reduced to that of seekers rather than as active co-creators.

3. Ensuring full digital citizenship for women farmers

In the current context where digitalisation is reconstituting governance systems from top to bottom, and recasting the relationship between states and citizens, there are a whole new set of rights-questions that emerge, with respect to ensuring full citizenship for marginalised groups such as women farmers. Key among these are detailed below.

a. Internet access and social inequalities: As public information and services become increasingly digitalised, the unconnected are clearly at a disadvantage when it comes to asserting their rights on the state. In other words, as the Internet becomes an enabler of the older citizen-rights and constitutional guarantees, not having access to the Internet can exacerbate social inequalities. The Common Services Centre program for ICT-enabled service delivery has not seen effective citizen uptake given that it has been envisioned as a 'profitable' service-delivery model at the grassroots through a franchisee model that involves a partnership between a designated state e-government agency, a private company and village level entreprenuers (VLE) selected, trained and monitored by the private company. Researchers and practitioners have found that the scheme's efforts to club the two very different motives of inclusive service delivery at the last mile and economic viability have led to a situation where “...the benefits of these projects are mainly captured by the middle classes...The skew in favor of higher income groups may be exacerbated by the need for micro-entrepreneurs to break even (...) vulnerable groups are less than ideal customers for kiosk entrepreneurs because of their lack of ability (or willingness) to pay for services on an ongoing basis”5.

b. Dealing with exclusions arising out of the transition to digitalised service delivery systems: As all government services go online, new exclusions are emerging. This includes data entry operators and computer kiosk owners emerging as new middlemen, misinformation about terms and conditions for accessing governance services, and new concerns about the lack of effective grievance redressal. As one activist from Mazdoor Kisan Shakti Sangathan shared with us in a workshop last year, “In the old days when a service was denied, the villager could go and collectively demand accountability from the concerned official. Nowadays, it is easy to blame everything on technology.” In areas such as land rights which are politically contentious, making technology the fall-guy leaves ample room for new forms of brokerage and patron-client cultures to emerge.

c. Citizen-data and new vulnerabilities: In India, the transition to a digitalised service delivery backbone has meant the creation of huge databases with personal data of citizens. The Aadhar/UID project has attempted to create a system for navigating across these databases, to assemble the various pieces of information by pulling relevant personal data traces from each database. Considering the absence of data protection laws which specify time and purpose limitation clauses for data collection and compilation exercises, enormous unregulated power to profile citizens is transferred to the state machinery. More worryingly, commentators of Aadhar have highlighted governmental plans to capitalise this citizen data as a key information resource by entering into partnerships with private

companies – in a clear violation of the fiduciary responsibility of the state. This is particularly worrisome in the farm sector where there is already evidence of big companies such as Monsanto acquiring companies in the business of weather forecasting to build new business models around climate-based risk management services. If the wealth of agriculture-related data about cropping and landholding patterns with state agencies were to be handed over to private players, the aggressive agri-business models that will emerge as a result are certain to edge out small and marginal farmers – especially dalit and adivasi women.

d. Right to information (and data): The right to information act enacted in 2005 has been an extremely powerful weapon for marginalised groups to demand accountability from state agencies. The provision for proactive disclosure too has been of tremendous significance. Through a circular issued in 2013, the Department of Personnel and Training has ensured that the proactive disclosure extends to online information held by government agencies as well, including that held in audio-visual formats. This is extremely valuable in the current context where there is emphasis on creating video records and photographic evidence in local governance – such as video recordings of Gram Sabha proceedings and GIS-based authentication of release of subsidies. This can potentially allow citizen audits and improve accountable governance. However, the data remains out of reach for local communities.

4. Key insights for policy: Leveraging the digital opportunity to further women farmers’ rights

1. Women farmers and other marginalised groups must have full digital citizenship. This means that access to Internet must be provided for as a public good and guaranteed as a universal right.

2. Facilitated public access facilities based on the principle that information is a public good, become vital for marginalised populations such as women farmers.

3. Egovernment systems may be good to remove traditional patron-client relationships. However, they also need to be transparent and allow for citizen feedback and grievance redressal so that governance is more accountable to the woman citizen.

4. Data protection law and respect for citizen privacy is vital for women, as they participate in digital spaces.

5. The digitisation and public disclosure of government records can empower women's groups and usher in greater accountability if commensurate provisions for community audits are mandated in government programmes. Data collected through video and GIS must be made available to local women farmers’ networks and a culture of public audit nurtured as digitisation becomes the norm. The government of Andhra Pradesh's Society for Social Audit is one exemplar in institutionalising such processes.

6. Data governance and management become vital as public services go digital. Controlling the granularity of information available to various users, authentication mechanisms, and permissions for making changes to the database, become important. Let us say that the local

6 http://www.thehindu.com/opinion/op-ed/your-data-going-on-sale-soon/article4733606.ece
government has access to information about who are the single women reporting irregularities in accessing welfare schemes, in the respective Panchayat. If this data is published, who should be allowed to see the details and to what extent? Who should be allowed to change the master database? What will be the provisions preventing tampering etc? This is an area where policy and legal directions are needed.

7. Citizen-generated data can support local planning, and enable women to influence local governance agenda. Participatory tools for mapping and informational crowd-sourcing are particularly useful. This potential is yet to be realised as the mainstream trend strengthens centralised control and monitoring with little focus on 'power to the edges'.

8. Digital literacy programmes need to be designed from the standpoint of citizenship. The Digital India vision does acknowledge that digital infrastructure, e-service delivery and digital literacy are key pillars for transitioning India into a knowledge society with a digitally empowered citizenry. However, it needs to concretely adopt a strong citizen-centric, gender aware and women’s rights oriented approach in the transition to digitalised governance systems.

9. Building ICT-enabled public information systems that are localised, women-centred and supportive of peer interactions, is an important way forward. Such spaces must also build the capabilities of marginalised groups for meaningful use of the Internet and ICTs for expanding their informational, associational and communicative choices. This would mean exploring convergences with existing ICT and e-governance policy frameworks. Some potential directions are suggested here:

   a. **Infrastructure:** As part of the Digital India vision, fixed broadband connectivity is being provided to all 2,50,000 Gram Panchayats under the Bharat Net initiative. This infrastructure can subsidise the creation of web-based localised information and knowledge portals at the village level on key issues/concerns, including rural livelihoods. Similarly, the Universal Service Obligation Fund can be utilised for providing subsidised mobile value added services for marginalised populations.

   b. **Digitalised Information and knowledge cultures:** Setting up ICT-enabled information centres/ hubs at the community level is a very effective model for catalysing new digitalised information and knowledge cultures as civil society initiatives have demonstrated. For example, the Women's Landrights Facilitation Centres initiated by the group Landesa in Orissa in partnership with the state government. These centres have focused on furthering women farmers’ access to their land titles, and training and other inputs — helping them use digital services and tools such as GIS maps in appropriate ways. Similarly, the MS Swaminathan Research Foundation's Village Knowledge Centres is an older experiment that highlights how community video and knowledge portals can help in combining peer learning and expert-based inputs for building a vibrant information, learning and knowledge culture that strengthens local livelihoods. Making Women's Voices and Votes Count, a project of IT for Change, KMVS and ANANDI, that worked in 3 sites in Gujarat and Karnataka between 2013-15 has demonstrated how women-run information centres can utilise GIS-enabled participatory mapping and IVR-

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based networking to engage the local Panchayat, and promote dialogue on gender and governance issues at the local level\(^8\).

Creating local information centres in partnership with women's organisations and women's collectives is a critical step forward for strengthening local information and knowledge cultures. To ensure that these centres are relevant to women farmers, adequate attention has to be paid to promoting linkages with existing agri-extension services and public institutions; and promoting expert and peer dialogues.

c. Gender-inclusive design of agri-extension services: The Mahila Kisan Sashaktikaran Pariyojana should be scaled up to all districts, and it should have earmarked funds for hybrid agricultural extension models that use ICTs along with face to face processes. The Farmer Portal will be meaningful only if such a connection is enabled. Local partnerships with women's collectives, and linkages to groups associated with the Mahila Kisan Sashaktikaran Pariyojana, will be important to enable the Portal to become a dynamic and relevant resource that responds to women farmers' needs and interests as users and contributors. It is important to ensure that price information services on mobiles are not left only to market players, who ironically have developed their markets predominantly using public information channels. The government must invest in fully subsidised push-based price information services on mobiles, for women. More investment in creating mobile services on rights and entitlements is also necessary.

d. Participatory information and knowledge services: Current info services such as the Farmer Portal and mKisan portal should be analysed through a gender-inclusion lens, to examine the default assumptions about users guiding the design of these portals. The role of 'expertise' is to be unpacked for who is an expert and how expertise can be found in the wisdom women have. Guiding content creation processes through such approaches can promote the rights of women farmers. Collaboration with women farmers' networks, CBOs and women's NGOs must be supported to create local resources such as videos and IVR/ SMS message services; document traditional knowledge around farming practices; generate dialogue on women's citizenship rights; and create feedback loops that strengthen agri-information and knowledge services. Pioneering efforts, such as the community radio initiative of the Deccan Development Society targeting women farmers, are useful to design local knowledge models, where women use peer-based platforms for sharing and collaboration. The budget for such initiatives can be drawn from current e-government efforts to involve Krishi Vigyan Kendras. Content created locally can also add to the repository of the ICT channels such as the Farmer Portal and mKisan portal, and the Kisan channel.

\(^8\) www.gender-is-citizenship.net/unwomen/