

Drought Preparedness of Vulnerable Sections in Rural Telangana



DISSEMINATION WORKSHOP REPORT



OBJECTIVES

In order to share and get feedback regarding the preliminary findings of both the policy and field research, engagement with the various sections of society working within the ambit of drought policy is an important component to the project. To this end, a dissemination workshop was held with Telangana-based individuals from government, civil society, academia, and research. The objective of the workshop was to seek directions for research and enquiries beyond the dominant discourses of structural and resource-centric solutions to droughts and to look at drought policy through a lens of inclusiveness and access.

The main outcomes of workshop were two panel discussions; 1) Policy and 2) Methodology and Implementation. The discussants from the relevant fields responded to some prompt questions followed by an open/round-table discussions where participants contributed very valuable comments and critiques regarding the current project as well as their own perspectives and experiences around drought. The various points that emerged from the workshop which for the purposes of concrete takeaways for the larger project can be discussed as either critiques, debates, and suggestions both for policy and research.

POLICY DEBATES

Convergence Issues

As was conveyed in the project dissemination, drought is a multi-sectoral issue and thus several line departments are involved in addressing drought from various levels. Thus, the question of convergence becomes very central in the operationalizing of handling drought – whether it is relief, mitigation, preparedness, and building resilience.

In general, there is a lack of convergence with the government's intent and action. With regard to drought policy, there has been convergence between various departments, but the committees that are formed after a drought operate on the basis of peoples' 'memory' of drought.

There is no convergence between irrigation engineers and agriculture officers, which impacts water use efficiency. The former are pushed to take up works rather than to educate farmers and do capacity building. Increased clarity on water management as well as drought management is needed as the two are not aligned.

There is no coordination between agricultural universities and action – for example, there are currently 42 lakh acres under cotton cultivation while only 15-16 lakh acres are suitable for it. The Dept. of Agriculture, know the risk, yet they are distributing the seeds. In general there is a huge gap between research, universities, and the government. There should be a shift to the micro level, as even there are mandal wise differences that should be taken into account.

The Role of Technology

As the participants were from mixed backgrounds, primarily physical scientists and social scientists/activists, there was a debate regarding the role of technology in combatting drought.

Many of the physical scientists echoed the sentiment that science and technology initiatives for short term drought management such as monitoring, hazard and risk assessment is important, as well as technology in agriculture such as drip systems. One gave the example of Kamareddy, where there is a huge demand for drip irrigation as it can lead to 3 crops per year as well as the need for transplanters. Smart agriculture enabled through technology and data-based farming in this context was also raised.

On the other hand, the limitations of technology were also discussed. For example, drip not only requires an assured source of irrigation, but also requires uniform water pressure, as well as proper salinity level. Technology needs to be seen in context, and how increased water use efficiency needs a proper support system. To this end, proper grievance redressal systems should also be in place.

Droughts: Disaster vs. Backwardness

The closing question that was posed during the project dissemination was regarding how to conceptualise droughts. Are they a disaster or a larger revelation of backwardness? Are they just rainfall deficiency or a larger condition of systemic neglect?

Seeing drought as rainfall condition vs. backwardness, brings up the point that drought is both cultural and agricultural. Common property resources as well as individual land holding sizes are decreasing. Drought is about jal, jangal, jamin, and jaanvar (water, forest, land, and animals) as well as the monsoon and the market, specifically how the market determines crop shifts.

Drought is both disaster and backwardness, and rather it is about vulnerability and how systems are built. Drought is not an overnight disaster, but that makes it all the more amenable to be being addressed.

Failure of the State

Telangana state was borne out of negligence, but today the government is doing the same thing. PDS rice, sanna biyyam in hostels, FDI, farming in polyhouses – is this having development? How to change development is the question we should be asking, otherwise nothing will change. There have been over 30,000 farmer suicides, and over 3,500 after Telangana state formation (the latter figure is probably underreported). There is a denial of the state of the crisis behind these deaths, as they are blamed on marital fights and other domestic issues. Prices remain low for farmers and in addition, soil depth, organic matter content, sub-soil salinity (affect deep-rooted crops) and the hard bedrock (raises issue of where to recharge) are important considerations – the latter two especially for Telangana. By raising these concerns regarding agrarian distress, one is labelled anti-development. The political class is based on 'short-termism' whereby programs that are put out are election-based (a period of a few years) rather than having a long range focus. Telangana should have a vision and imagine a potential to be enhanced.

POLICY CRITIQUES

- There is less emphasis on groundwater recharge over borewell digging. MK should prioritize tanks with structural cracks.
- High premiums for high risk crops such as cotton do not motivate one to take up crop insurance. Furthermore, the premium is to be paid even before the crop is sown.
- The 'doubling farmers' incomes' is incorrect for Telangana as our baseline is off; the average household income is 20% lower than the national average. Agriculture must grow by 120-127% to reach the projected doubling, and currently it is at 3%.
- Seed corporations are taking over production in place of the agricultural and horticultural universities. Even though 60% of seeds are produced in Telangana, the benefits of this production are not being distributed to the producers and consumers (i.e. farmers).

POLICY RECOMMENDATIONS

Many points were raised with regards to bettering the implementation of various programs and policies, as well as new proposals to deal with and build drought resilience. Many of them feed into the aforementioned points, but the specific recommendations are given below.

Institutions

- Innovation to adapt to drought that goes beyond technology and toward institutions, specifically those related to how farmers manage. For example, *pani panchayats*. The aim should be to scale up and draw lessons from these institutions.
- In the context DFI, better alternatives such as MSP and Crop Insurance should be given. The ecosystem is also in need of attention whereby farmers should be incentivized for better use of water.

- There must be a strategy at the mandal level, with a committee there meets regularly. There was a Telangana Drought Policy draft drawn up 3 years ago, but it has since lapsed reflecting a negligence from the government's side.
- Institutions need to be built, specifically including things like grievance redressal so as to ensure a revamping for public support systems.

Assets

- Land preparation is needed, for example, to counter the condition if there is excess rainfall followed by no rainfall, regardless of soil type.
- Inexpensive contour dig furrows can allow water to percolate and thus extend moisture to 5 rows.
- Focus should be on farm ponds and borewell recharge structures as these give good results.
- A shift from wage to asset creation is important. In 487 mandals, 50% water stress condition is there and thus requires water conservation and artificial recharge so percolation can happen.
- Watershed development in hilly areas, where there may be decent rain but no tanks and therefore the water level would get affected after the rains.

Cropping

- Crop Contingency Plans come into effect once failure has already happened. Crops are lost both during drought and normal years, and that therefore should be a solution to drought before and not after drought.
- Strong emphasis should be given cluster approach of crop colonies which are based on science, spatiality, NRSA data, culture, local wisdom, and soil. These crops would be part of drought proofing. Agriculture is linked to the market, so the government must take a cluster approach otherwise the corporations will dominate. Drought-resilient seeds and NREGA should be linked with this, and the lack of awareness in technology, in schemes should be dealt with to bring change in cropping pattern. The cluster approach must consider the resources available to the farmer.
- Planning crops based on agro-ecological regions is important. The policy should be based on agro-climates, new seed varieties which can be grown based on the seasonal conditions.
- The cropping pattern for both drought and normal years need to be looked at; Ragi and Korra are perfect crops for drought and can be promoted, intercropped, given market support, and used scientifically.

Other

- Since 85% of farmers are small and marginal, policy must concentrate on them. This includes bringing awareness regarding harvests, custom hiring centers, small implements etc.
- Judicious utilization through social norms needs work as well so that water can be used for all purposes.

RESEARCH DEBATES

There was a debate raised of regarding the starting point of this kind of research. It was said that research needs to start with the farmers' perspective and that their needs should form the initial understanding, rather than what the policy says. However, since there was a need to understand the policy to see what is not working and to propose recommendations, as well as to engage in dialogue with the government, the project for the moment was largely based on policy.

It was added that farmers' decisions must also be seen in the context of the media/industry as well as the lack of extension that creates information asymmetries. However, it was clarified that in first approaching farmers, one can understand their strategy in terms of preparedness, as it is the farmer who knows the risk bearing capacity of her land.

SUGGESTIONS FOR FUTURE RESEARCH

Again, due to the mixed participation of various sectors and disciplines, various suggestions were made regarding the future direction of this research.

- Using a village as a unit, water budget can be studied, which could include details of rainfall, capture, percolation, water depth, whether there is excess water and need for structures, as well as cropping systems. ICRISAT's mandal-wise climate change index is also useful, and there is a need for new technologies and climate-specific extension.
- Why farmers take up particular technology must be understood. Their preparedness strategy is only water saving, but should also be in managing water. Perception studies can be done through survey research and PRA methods whereby group interviews reveal perceptions of various policies.
- The selection of districts for study should be based on vulnerability mapping and that there needs to be proper consultation with the farmers as the perception of the farmer is needed.
- Drought is too broad of an approach for study. Employment and cropping pattern shifts must also be understood with how people are coping. Further, the role of institutions should be probed.
- The future directions of this project could cover the legal/institutions/acts that require convergences; agro-climatic zones where sampling must be strategic, taking into account farm household decision making as well as agricultural labours' households, to then work back and forth with the policy taking into account the regional differentiations as well as the legal and institutional innovations.

As can be gleaned from the proceedings, the workshop was a space where people from different professional background exchanged various experiences and conclusions with regard to tackling drought. Several comments and critiques regarding the drought policy study was raised, specifically the lack of recommendations, the need for a more robust methodology, as well as to take into account farmer perceptions. The Policy Panel gave government officials a platform to discuss how drought intersects in their respective departments as well as allowed other participants to directly ask policy related questions, whereas the Methodology and Implementation Panel allowed a more interdisciplinary discussion where the current problems with Telangana with regard to drought and agriculture were raised. The discussions also enabled certain debates particularly that of top down vs. bottom up approach to research as well as the lack of integration of social science, scientific research, as well as policy.