G20 GLOBAL LAND INITIATIVE

Azim Premji University

प्रगतेः मूलं प्रकृतिः

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Aligning Development Policies for Green Jobs and Land and Ecosystem Restoration

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1. The problem

The Degradation of Land and Ecosystems is a major problem globally, as well as in India, which needs to be addressed urgently. In India, nearly 30 per cent per cent of the country's total geographical area is undergoing degradation[1], having profound implications for millions of lives, livelihoods and the country's rich biodiversity. According to a study, the cost of land degradation and land use change ate up to 2.54% of India's gross domestic product (GDP) in 2014-15[2] The United Nations has tagged this as the Decade on Ecosystem Restoration (2021-2030)[3]. A decade where efforts to massively scale up the restoration of degraded and destroyed ecosystems will be made. This was after studies revealed that an estimated 1 million species face the threat of extinction, many within decades, if we do not act urgently to change the course of things.

While the decade is important globally, it is particularly critical for India - one of the mega biodiverse countries of the world which has four of the world's biodiversity hotspots. Owing to its diverse physical and climatic conditions, it accounts for nearly 8% of the recorded species with approximately 47,000 plant species and over 100,000 animal species[4]. However, the pressure on ecosystems and biodiversity is also immense, as India, with 2.4% of the world's land area, supports 18% of the global human population and accounts for 15% of the world's livestock. Further, the impact of land and ecosystem degradation is particularly harshly felt on the people of India - over half of whom are directly dependent on agriculture and forests, with approximately 20 percent, including indigenous communities, women and marginal farmers dependent on forest resources.

It is not just India's land and forests which are suffering. India is suffering from one of the worst environmental indicators globally. The recently released Environmental Performance Index (EPI) 2022, measured by Yale and Columbia universities, ranks India at the bottom among 180 countries[5]. This poor environmental performance has serious implications for the sustainability of economic growth and development as well as for human health. A study found that, in 2019, air pollution led to deaths of nearly 1.6 million people in India. Pollution has also been linked to the high prevalence of Covid 19 and deaths to it as well[6]. A Harvard study shows that long term exposure to an increase in even 1 microgram/cubic meter pollution could increase the probability of mortality due to Covid by 11%[7].

On the other hand, the economy is also suffering tremendously as unemployment rates remain high. In the last quarter of 2022 for instance, the urban unemployment rate stood at 7.2%. According to data from the quarterly periodic labour force survey released by the Ministry of Statistics and Programme Implementation, male urban unemployment rate during this period was 6.5% while the female urban unemployment rate was higher at 9.6%[8].

2. The Goal

Given the twin crises of employment and environment that the country is facing, it is clear that regular developmental strategies will not work. The need of the hour, therefore, is to invest in, and promote 'Green Jobs' – i.e. jobs which contribute positively to the environment while also being 'decent' in the sense that they provide decent and safe working conditions for those involved in them, and ensure respect and dignity. Investment in green jobs must go hand in hand with a just transition in a way that is as fair and inclusive as possible to everyone concerned and leaving no one behind.

Recognising this need, Green Growth was one of the seven priority areas highlighted by the Finance Minister, Government of India, in her Budget Speech for 2023-24[9]. The Government of India has asked state governments, companies and citizens to focus on green growth and green jobs to achieve the ambitious target of net zero carbon emission by 2070.

A report by the International Renewable Energy Agency and the International Labour Organization titled 'Renewable Energy and Jobs — Annual Review 2022', stated that as many as 863,000 green jobs were created in India in the year 2020-21[10].

However, there is a massive untapped potential for green jobs creation in India. According to the World Economic Forum, nearly 50 Million Jobs can be created with a projected contribution of $15 Trillion through India's transition to a net zero economy[11].

As part of the Bonn Challenge, India pledged to restore 21 million hectares (52.5 million acres) of degraded land by 2030[12]. In 2019, the Government of India , at the 14th Conference of Parties to the United Nations Convention to Combat Desertification (COP14 UNCCD), raised this target to 26 million hectares (65 million acres)[13].

However, achieving this goal requires us to relook our development strategy and our existing policies. We need to realise that protecting the environment and promoting land and ecosystem restoration cannot be the sole responsibility of a few ministries, departments and agencies of the government while all others continue business as usual - most of which involves activities which contribute to land and ecosystem degradation. There are 58 Ministries and 93 Departments through which the Government of India at the Centre operates. Out of these, only two Ministries - namely the Ministry of Environment, Forests and Climate Change and the Ministry of New and Renewable Energy - have an explicit mandate to protect the environment. Meanwhile, the activities of all other government ministries, agencies and departments are supposed to continue as usual without concern for the impact of their policies and actions on the ecosystem - except where there are specific policies which require some consideration to be given, such as the policy around conducting Environmental Impact Assessments for projects beyond a certain size. Meanwhile, whether it is the construction of roads, highways, houses, ports, power plants, factories or policies to support the development of agriculture, food security, markets, schools and colleges - all of which have significant environmental implications - the ecological implications and potential are rarely considered. If we are to move towards a development path which leads to ecological restoration, all policies will need to have elements of sustainability (the explicit understanding and consciousness that resources are finite, there are complex interlinkages between socioeconomic, political and ecological systems, and adherences to principles of fairness and justice) built into them in order to achieve the goals of ecological restoration that we wish to achieve. This is also true forpolicies for rural development.

In this scenario, let us look at the existing opportunities and potential for ecorestoration and green job generation in rural India:

2.1. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

The Mahatma Gandhi National Rural Employment Guarantee Act (NREGA) is a landmark legislation in India under which the Government spends nearly Rs. 70,000 crore (approx. 0.4% of India's estimated GDP for 2022-23) every year to construct nearly 90 lakh assets and employ over 15 crore workers. One of the primary focus areas of MGNREGA has been Natural Resource Management (NRM) with the Government stipulating that a majority of the expenditure under NREGA must be incurred on NRM assets. From 2019-20, NRM works constituted more than 60% of the total MGNREGA expenditure[14]. Most of the works under NRM are aimed at the restoration of Land andEcosystems. These include works for water conservation and harvesting (such as ponds, check dams, boulder check dams, 30x40 models, trench cum bunds etc.), soil conservation works (such as Farm Bunds), Ecosystem Restoration works (such as tree plantation)[15].

The institutional architecture of the MGNREGA — including rights-based social protection, inclusion of women and marginalized communities, participatory planning of activities, and mandate for providing public funds to NRM works—provides a strong foundation for restoration at scale and generation of green jobs. The scheme also benefits a large number of women who are enrolled as mates (site supervisors) and workers while prioritizing land productivity enhancing assets that are supposed to serve the most vulnerable sections of a village. Given MGNREGA guarantees parity of wages for men and women, it has huge potential for bringing gender equality. The demand-driven nature of the program also activates decentralized institutions like gram sabhas, thereby enabling community participation in planning. Leveraging MGNREGA as a vehicle for restoration, an estimate shows, can lead to restorating rural landscapes in India, create 1058 million days of labor and provide jobs to 5.2 million individuals at the rate of 200 days of guaranteed work, per worker[16].

Some states have done some exemplary work in using MGNREGA for land and ecosystem restoration A study to understand and assess the potential for green jobs in MGNREGA in Madhya Pradesh led to the creation of a green index for MGNREGA works which could be used for planning of MGNREGA in a manner so as to ensure an overall positive environmental impact of MGNREGA activities[17]. The study also led to an understanding of the institutional gaps which led to ecologically poor design and execution of MGNREGA assets and ways to overcome these. Other studies from across the country reported positive impacts of MGNREGA works on the environment. For instance, a 2011 study conducted in Karnataka revealed that MGNREGS works reduced vulnerability of agriculture production, water resources and livelihoods to uncertain rainfall, water scarcity and poor soil fertility[18]. A study comparing the impact of NREGA works in different agro-ecological zones across four states showed that NREGS works have had an impact on reducing agriculture and livelihood vulnerability by improving several environmental indicators[19]. NRM works have resulted in improved land productivity which led to better livelihood outcomes[20]. A study by Indian Institute of Science (IISc) Bengaluru showed that 62 Mt CO2 total mean carbon (biomass and soil organic carbon) were sequestered at the national level for the year 2017-18, considering all the Agro-Ecological Regions and Natural Resource Management (NRM) works.

Recently, the Government of Karnataka along with Azim Premji University, Libtech India, ATREE and the Foundation for Ecological Security hasve initiated work towards understanding the avenues for aligning MGNREGA with the goal of ecological restoration. This work was done as a pilot project in Chikkabalapur district of Karnataka. Similar to earlier studies, the study by Kale and Bhaskar found massive potential for land and ecosystem restoration while enhancing livelihoods through MGNREGA[21].

However, due to various issues, the potential for land and ecosystem restoration is not being realized. These issues include lack of capacity amongst the implementing agencies, poor design of assets, lack of communication among the community members regarding the impact of these assets etc. The investments in MGNREGA are also not backed by institutional arrangements such that the local communities take a long term interest in safeguarding and managing the assets created. Land tenure or people-land relations, a crucial aspect for sustaining benefits from restoration, is often overlooked in restoration activities[22].

Often, insufficient efforts are made to promote community stewardship and community ownership of the assets. As a result, MGNREGA's potential to create community assets and thereby simultaneously restore ecosystems and enhance incomes, remains grossly unfulfilled.

2.2 Community Forest Rights, Forest Restoration and Forest Based Livelihoods - Pathway for Green jobs.

Commons – such as forests, pastures, water bodies – and the ecosystems that they nurture together form the basis of economic prosperity and welfare, not just for rural communities but for all of humankind. Healthy, functional ecosystems provide food, fodder, fuel wood, medicinal herbs, etc., and also perform key ecosystem services – such as pollination, pest and disease control, carbon sequestration, air purification – that form the backbone of several economic systems, especially those of rural and tribal communities. Thus, while Commons are an important aspect of the social, cultural and ecological fabric of humankind, they also play a key role in determining the economic opportunities and overall welfare of communities.

However, in India, commons are in a state of decline. For instance, Indian State Forest Report 2021 reveals, from 2019 to 2021, 9,117 sq. km. of forests turned into scrub and barren lands. Between the 2015 and 2021, the quality of existing forests degraded over a total of 74,457 sq. km., equivalent to more than half the geographical area of the state of Telangana[23].

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (known as Forest Rights Act or FRA), provides a great opportunity for forest land restoration and conservation as well as generating livelihood opportunities.

The Community Forest Rights component of the FRA has the potential to bring about radical changes in forest governance by, among other things, conferring community forest resource rights and management authority on forest-dwelling communities. Over the last 12 years, a total of 76,154 Community Forest Resource (CFR) claims to 88,04,870.81 acres of forestland have been recognised and, in many of the recognised CFR villages, forest dwellers have begun to exercise their rights. This includes harvesting and selling bamboo and tendu leaf, increasing forest protection and reducing destructive practices, managing fires, regenerating degraded patches, and identifying patches that require strict conservation in recognised forest areas[24].

In states with forests as the predominant resource system, formal rights to access, use and sell produce from forests reduces friction between households and authorities when using the forests for fodder, timber, fuel-wood, and other NTFPs. Importantly, it also reduces the risk of land alienation. They transact directly with markets and fetch more from sale of forest produce by reducing the role of middlemen and contractors. Such security enables the disadvantaged communities to invest in expanding assets such as livestock. In each context, by providing equal use and access rights for women and disadvantaged groups, these Commons become 'spaces of the poor', expanding economic opportunities for those most in need.

2.3. Governance Strategies and Plans and Green Job Potential

Not just rural development policies but also governance strategies and plans (such as those for Solid Waste Management in urban and rural areas) have massive scope for improvement in design and execution in order to facilitate the creation of green jobs and to contribute towards the restoration of land and ecosystems. A study on waste management in India has found that a rethinking of strategies for waste management can lead to massive reductions in government expenditure on waste management, creation of millions of new green jobs and improvement in environmental outcomes[25].

In this context, it is also important to identify and promote traditional/existing green jobs, such as those in environmentally sustainable industries including handloom and handicrafts, non-timber forest produce (NTFP) based industries, social forestry, and waste/water management professions amongst others.

However, a lot more needs to be understood about the challenges and opportunities for utilisation of NREGA as well as other development policies (such as PM Awas, Swachh Bharat Abhiyaan, PMGSY, NRLM etc.) for land and ecosystem restoration. The Government of India spends over Rs. 1.57 lakh crore for schemes and policies of the Ministry of Rural Development. In addition, it spends nearly Rs. 2 Lakh Crore on Food Subsidies, Rs. 11,600 crores on Mid Day Meals and Rs. 20,000 crore on saksham anganwadis. Overall, this amounts to spending of nearly Rs. 3.7 lakh crores annually.

While all this expenditure is primarily towards achieving human development outcomes, it has massive implications for the environment as well. Yet, there is little to no effort to reduce the environmental damage from these policies and align them with environmental objectives of creating green jobs and restoring degraded lands and ecosystems. However, there is a massive potential for doing this. For instance, there is a massive potential for improving the design of houses constructed under the PM Awas scheme in order to align them with environmental objectives. Similarly, there is potential to improve the design of roads constructed under the PMGSY, the food grains provided under the National Food Security Act and the meals provided under the Mid Day Meal programme to improve the environmental impact of these policies.

4. Resource governance and need for Frontline Workers.

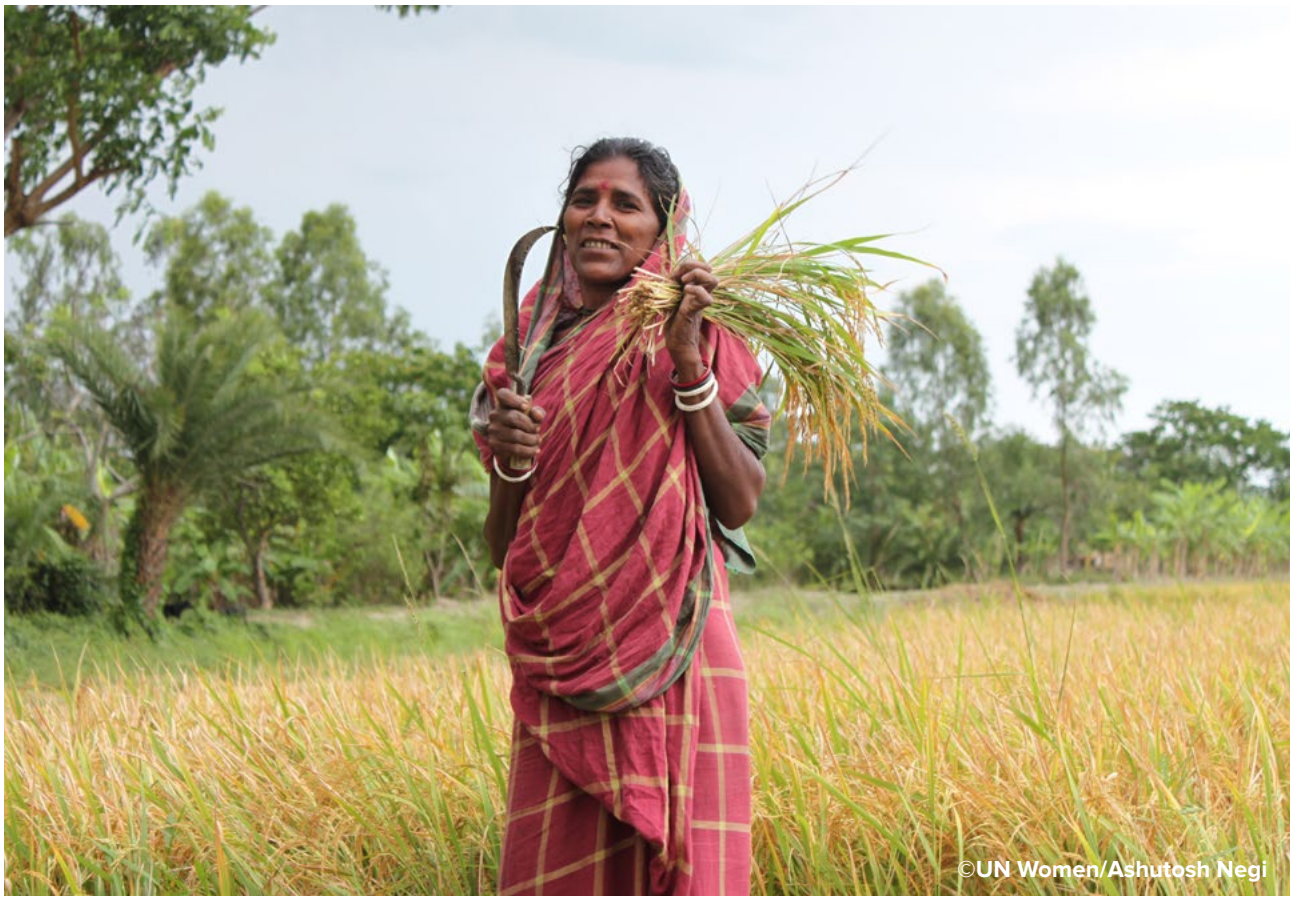
In order to sustainably manage the natural resources such as water , pastures and forest, we need trained functionaries at the grassroots level. As the management of these resources entails some technical and specialized knowledge, functionaries with these technical skills need to be deployed and nested at proper institutional structure. However, there is an absence of such functionaries currently. In the current system, frontline workers' primary function is to work directly with the beneficiaries or the public providing services, support, or products usually on behalf of the government or NGOs. These key functionaries help in bridging the governance vacuum at the grassroots level ensuring the last mile delivery of schemes and programs. Most importantly, these are recruited from the local villages and provide services in the regions they are familiar with. A case in point is the impact of ASHA workers on India's healthcare indicators. Since 2005, when ASHAs were added to the healthcare frontline force, their efforts have contributed to a 59.9 percent decline in maternal mortality and a 49.2 percent decline in infant mortality. This example underscores that there is scope to develop frontline cadres in other sectors as well. The water, forestry and agriculture sectors, in particular, would benefit significantly from stronger involvement of frontline cadres[26].

In the water sector, current government programs like Jal Jeevan Mission[27] and Atal Bhujal Yojana[28] stress the importance of community involvement in planning and implementation by involving frontline workers and covening Gram Panchayat Sub-committees. Especially in the water sector, there are technical (mapping, water budgeting, well monitoring, quality assessment etc), supporting (communication & outreach, awareness), administrative (decision-making, approval etc) roles that these frontline workers need to

perform. In the state of Odisha, Krishi Mitras (SHG women workers associated with the Odisha Livelihood Mission) are key functionaries responsible for the agriculture development in their Gram Panchayats. They are trained agriculture extension officers who are spreading awareness about sustainable agriculture. Their tasks involve visiting farmers, giving expert advice on agriculture inputs, performing soil quality testing, giving awareness about sustainable irrigation practices among other things[29].

Studies by civil society organizations have found evidence for how these key frontline workers bridge the governance vacuum at the grassroots level by promoting economic growth in the village, ecological security and achieving social equity measures[30]. However, the potential of frontline workers are not recognised, They often receive poor training that does not adequaltely skill them to deliver on their key objectives. Their jobs are seen as undignified and are often without adequate compensation. In ecological restoration, governance of water, agriculture, soil and forestry are also key components and frontline workers with expertise are needed to fill this role. Recognising and the building the expertise of frontline workers provides another pathway for green job generation.

When talking about green jobs linked with land restoration, it is essential to leverage and enhance the knowledge of tribal/forest-dwelling communities. It is also important to design policies that ensure job security for tribal communities.



3. The Challenges

While there is a massive need and potential for aligning development policies for green jobs and land and ecosystem restoration, there are many challenges which need to be overcome.

These include:

- **Lack of Political Wil**l: Achieving the desired environmental goals through existing development policies would require political will in order to undertake the effort needed to make the required changes in policies, build sensibilities and capacities where required, achieve coordination across Ministries, departments, schemes and policies and ensure that policies and schemes for achieving restoration goals are adopted and executed properly. The lack of political will results in decreased allocation to schemes such as MGNREGS or delay in implementation of Community Forest Rights and delay the ecorestoration potential. For instance, NREGA allocation which accounted for 0.35% of the GDP in 2019-20 decreased to 0.29% in 2022-23[31]. Similarly, as against the potential 40 million hectares of forest land over which FRA claims can be recognised, right over only 14.75 % has been recognized[32].

- **Siloed and scattered actors with lack of convergence in planning and action**: While multiple actors, programmes and initiatives work on the problems of rural livelihoods, water security, and farmer distress, they are, unfortunately, siloed and disjointed. Governments at all levels, NGOs, Panchayat Raj Institutions and other actors do not plan and implement in tandem, ultimately failing to deliver concrete and lasting impact. At the policy level, this could result in policy incoherence where policies aiming to achieve different goals tend to be made in isolation from each other, raising the risk of divergent policy objectives, activities and outcomes. For instance, policies aimed at promoting sustainable groundwater use are sabotaged by policies that promote subsidized electricity tariff for irrigation that can result in overexploitation of aquifers. At the implementation level, government and civil society actors, although working towards similar goals, due to lack of platforms for convergence, do not work together. Within government departments, lack of convergence leads to moreefforts and inefficiency.

- **Lack of Awareness and Sensitivity among policy makers:** Policy makers often lack the awareness and sensitivity to understand the implications of policies on the land and ecology. For instance, while deciding a housing or transport policy, they may not be sensitive to or aware of the implications of the housing or transport projects on the environment.There is a need to integrate systems thinking approaches in the planning and implementation of policies that take into account the interlinkages between biophysical(soil-water-vegetation) and socioeconomic(agriculture-livestock-forestry) factors and political economic systems.Systems thinking tools and approaches help make the interconnected visible and help policy makes aware of the positive or negative externalities of their policies on the different systems.
- **Lack of capacity and technical knowledge among those making Policies:** Further, even if the policy makers are sensitive and aware of the environmental implications of policies, they may not have the capacity and knowledge to design policies in a way to minimise the negative implications and maximise the positive implications of the policies. For instance, even if policy makers are sensitive about the implications of housing projects on the land and ecosystems, they may not have the knowledge and/or capacity to redesign the housing policy in order to achieve the desired goal of environmental sustainability while ensuring the policy is able to achieve its other goals. The lack of a scientific approach, particularly in the implementation of MGNREGA works, is resulting in questionable durability, and relevance of the assets created. Excessive focus on civil works coupled, incorrect choice of location and design, and lack of knowledge of the local governance around permissible activities under this scheme are leading to reduplication of the assets and ultimately to unsustainable development. Another problem is also the lack of scientific budgeting of NREGA works. Revision of budgets by adding 10% to the previous year's budgets is also contributing to the waste of funds in unnecessary works with no systematic estimate of the work to be undertaken.

- **Inappropriate design of policies:** Often, policies are designed without taking their environmental implications into account. For instance, in a specific location, communities may traditionally be used to construct houses in ecologically sensitive and sustainable ways using local resources which stay cool in the summer and hot in the winter. However, housing policies designed in Delhi and adapted in the state capital may prescribe standard designs for houses constructed under the policy which require the use of non-local materials and require the heating during winter and cooling during summer. While such standardised policies may be helpful in some respects (eg. ensuring ease of monitoring), they may be detrimental from the perspective of sustainability. It may be possible to redesign policies in a way so as to incorporate the ecological and sustainable aspects of housing design practiced by the communities while also meeting other requirements such as cost efficiency, ease of monitoring and ensuring accountability, durability etc. Policy design does not always incorporate social dialogue to capture voices of stakeholders impacted by them. Demand for policies needs to be generated from the ground. For this, it is essential to build awareness and capacities of local governance on issues of climate change and restoration, and also in negotiations, in order to ensure their meaningful participation in policy making.

- **Lack of knowledge and capacity among those executing policies**: Even when the design of policies may have incorporated elements of sustainability, often, they may fail at the level of execution. For instance, toilets to be constructed under the Swachh Bharat Abhiyaan are designed in a way so as to facilitate composting of human waste such that the compost can be used by the owners in their own farms and fields. However, in the absence of appropriate knowledge, those executing the policy often fail to communicate the relevance of this aspect. In effect, people constructing the toilet often feel that the two pits may be too small to accommodate the human waste that will be generated and end up constructing single large pits. Once these pits are filled, they need to be emptied by a manual scavenger or mechanically and disposed of in a water or unused land area, thereby polluting the land or water. Similarly, many states have pushed for the construction of trench cum bunds (TCBs) under NREGA in order to conserve water. However, it is often observed that the TCBs are constructed in a way that they would be unable to serve their purpose of conserving water.

- **Potential trade offs between the primary objectives of the programmes and environmental restoration?**

- **Emerging 'green' technologies** such as renewable energy can be a driver of land degradation

- **The infinite consumption mode**l, propagation of consumerism and lifestyle issues need urgent attention. Localisation of global concern should be a priority.

4. What Can we do:

The purpose of our meeting is to discuss what we can do to address the challenges mentioned above and achieve the goal of aligning development policies for creation of green jobs and land and ecosystem restoration.

Below we discuss some initiatives that could be taken up by this group (with the support of the G20 Global Land Initiative).

4.1. Research

- Clearly defining greening, green sectors, and green jobs in the rural context.
- Understanding the true environmental implications and potential for green jobs of existing policies such as MGNREGA, PMAY, PMGSY, NFSA, NRLM, policies for supporting farmers and agriculture etc.
- Documenting the environmental potential of existing policies and the changes required in them to achieve this potential.
- Documenting and demystifying successful examples of policies and programmes which have managed to be aligned towards green jobs and land and ecosystem restoration - study what worked and what did not work.
- Evidence based research on the potential for ecosystem restoration and green jobs through mainstreaming environment into development policies, and mapping the institutional mechanisms in the sector.
- Understanding alternative causalities that may exist between environmental restoration, poverty, gender and other intersectional social attributes within communities and regions.
- Research on how essential environmental services creating green jobs in rural areas (such as waste collection) can be funded by schemes such as MGNREGA, based on success stories such as in the state of Odisha.

4.2. Advocacy and Sensitisation

- Making awareness content(audio-visuals) on the need and potential for ecosystem restoration through development policies
- Recognizing the importance of strengthening secure tenure restoration nexus
- Strengthening the monitoring mechanism of MGNREGS. Leveraging Big Data Analytics to sort out issues in MGNREGS implementation.
- Workshops with Policy Makers on the Need and Potential for aligning development policies for environment
- Policy briefs highlighting the environmental implications of policies and their potential for land and ecosystem restoration and generation of green jobs.
- A Public Education campaign on understanding environmental implications of policies and the potential for achieving restoration through them.
- Building collaboration between academia (including students) (science and social sciences), civil society and government actors to develop a 'common language' for working towards a common goal, while taking into account differences and plural perspectives
- There is an assumption that we will develop green solutions for the deprived households, that

we ourselves do not practice. To develop locally acceptable solutions by taking into account local needs and opinions and operationalise them on scale.

» Approach of Community involvement and localized visioning in terms of agricultural productivity, climate change, resilience, green job futuristic planning should be ingrained in planning

» Climate change discussions at the grassroots level, like in Gram Sabhas, not just conferences.

» Sensitisation in terms of addressing the problem of land degradation. The notion that 'Poor degrade lands' is a problematic one. Understanding that inequality leads to degradation and asking ourselves who is going to be benefitted by restoration is a necessary step to sensitize people to poverty and social exclusion.

3. Capacity Building

» Workshops/Training Programmes with Policy Makers on the need and potential for integration environment design and thinking into policies and the ways to go about it while also being sensitive to aspects of equity, inclusion and diversity (such as how to design policies which are not sensitive to the environment but also to gender, physical ability, caste etc.)

» Capacity Building Workshops/Training Programmes with implementing agencies on how to use existing policies for green jobs and land and ecosystem restoration. This capacity building should also happen for horizontal platforms like Panchayats and Women's collective to get the confidence of these communities instead of always keeping the programs vertical.

» Capacity Building/Training Programmes/Short Courses/Diploma programmes with Civil Society leaders on integrating environmental design into their existing work: For instance, a course on how civil society organisations working on livelihoods can understand the environmental implications of their work and design activities which maximise livelihood gains while also ensuring the livelihoods generated are "green"/"sustainable"

» Build student groups as environmental stewards. Develop a "Climate Healers certification program" to be offered in schools and colleges to students aged 10-25 and create a cadre of ecologically conscious students who can advocate for people, planet and the animals.

» Better understanding of what worked/ did not work. NRLM - works with collectives of women but makes use of NREGA resources. NRLM's entire sustainable mission is financed through MGNREGA. Identify cases of success/ failure from such initiatives.

» Capacity building of the frontline workers in water and agriculture sectors to address the governance gap at the grassroots. In the current system, the capacity building of the frontline workers is not equipping them to grapple with the complex problems at the grassroots level. The training programs are not designed keeping in mind perspectives from adult learning. Firstly, the existing training programs are trainer centric and not trainee centric. They do not take into account the needs of the learners, and follow standardized modules that are not contextualized and take into account the regional variations. Secondly, there is a one-shot approach to capacity building training sessions.. Most often, the frontline workers have to go through high Intensity low frequency training where they are expected to master all the concepts in one or two day sessions. These training sessions usually happen once or twice in a year. This needs to shift to high frequency, low intensity training where there is continuous engagement with the learners that is spread across the year. Thirdly, the modules should have case-based learning where complex cases identified by the learners at grassroots are taken up for discussion and solutions are reached through guided mentoring sessions with experts and peer learning. This provided learners year round access to experts/peers who might have encountered and found a solution to the issues. Fourthly, in order to recognise the expertise of the frontline workers in the system, they need to be certified. A formal certification aspect of NRM can give dignity to work they are doing and legitimize their agency and expertise. Fifthly, in order for these workers to be recognised their certification and

skill sets should also be recognised in government program implementation. Shifting from high intensity low frequency training to low intensity high frequency training. Facilitating peer to peer to peer learning through guided mentoring sessions. Ensuring Certification of frontline workers in specific skills such as water budgeting etc. Working towards amplifying and recognition of their skills in the ecosystem.. Address the existing gaps in making MGNREGA workers a part of the planning process, their involvement in choosing the kind of work they want to do from a worker's and village's perspective

Design and build management tools that can link NRM and NREGA work. The tool will help planners to decide the places where the NREGA works should be undertaken. Introduce these tools in Gram Sabhas, build their capacities to use technology to create scientific assets. This will not just help in avoiding reduplication but also regeneration of the existing assets.

4.4. Support

- Create a cell/agency which supports policy makers in mainstreaming environment in development policies
- Create a cell/agency/group supports implementing agencies in using existing policies for land and ecosystem restoration
- While the focus under MGNREGA is on land restoration, the employment aspect should not be sacrificed. There should be a convergence between employment and land restoration. Creating groups that can support this idea to balance both.
- Create grandmother's councils and allocate them resources.
- Create economic model where nature is not treated as an object and all the following points are looked at while talking about NRM :
- Ecology
- Economy
- Nutrition
- Inclusion
- Gender
- Build a village model region wise with 100 villages where actual implementation of all the discussions is done.

Creating an Entrepreneurship platform and a Rewilding startup Ecosystem for exponential job creation in Rewilding :

- India has a thriving startup ecosystem that has been rapidly growing over the past few years. The country has seen a surge in the number of startups, with a significant portion of them operating in the technology and e-commerce sectors. The government's efforts to promote entrepreneurship, ease of doing business, and access to funding have been instrumental in fostering this growth.
- The startup sector in India has emerged as a significant contributor to job creation, with a wide range of startups operating in various sectors. While the sector is often associated with tech jobs, there are many startups operating in other fields as well, such as healthcare, education, agriculture, and logistics.
- This group can perhaps help create that enterprise ecosystem and create a very large number of jobs in "Rewilding India" - A Program that aims at bringing exponential scale to rewilding and generating a significant number of jobs in this sector.
- This can be one of the greatest opportunities to contribute to both regreening and job creation for the country.

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