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To contribute to the critical matter of India creating just and sustainable employment, the University has set up the Centre for Sustainable Employment (CSE), which conducts and supports research in areas of work, labour, and employment. The University is attempting to provide empirically grounded, analytical reflections on the state of work and workers in India, as well as to evaluate and propose policies that aim to create sustainable jobs. To this end the University also gives grants to create new knowledge in the above areas. It also hosts a working paper series to which contributions are invited from researchers, policy-makers, civil society actors, and journalists. The University's CSE website is an important part of this agenda. In addition to research papers and policy briefs, it hosts government reports, as well as data and statistics on the Indian labour market.

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Strengthening Towns through Sustainable Employment: A Job Guarantee Programme for Urban India

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Executive Summary

- 1. We propose the creation of a National Urban Employment Guarantee Programme that strengthens small and medium-sized towns in India by providing urban residents a legal right to employment, improving the quality of urban infrastructure and services, restoring urban commons and ecology, skilling youth, and increasing the financial and human capacity of Urban Local Bodies.
- 2. The proposed programme seeks to address the following key problems:
- Underemployment and low wages in the informal urban workforce
- Migration to large cities from small and medium towns
- Poor quality of urban infrastructure and services
- Ecological degradation of urban spaces
- Shortage of human and financial capacities of Urban Local Bodies
- Unemployment and lack of skills in the educated labour force
- 3. Groups and organisations working on urban issues across India have many years of valuable experience solving these problems. We hope they find this proposal of interest and invite them to respond to it.
- 4. This programme should have a strong legal basis in the form of a National Urban Employment Guarantee Act which provides a statutory right to employment at specified wage rates and number of days. While it draws on some principles of the rights-based framework of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005, the programme has a broader scope as it deals with varied forms of employment. We emphasise that the programme would not be at the cost of MGNREGA but rather the two would go hand-in-hand.
- 5. The programme should be applicable for all cities and towns with a population less than 1 Million (10 lakhs). It covers about 4000 Urban Local Bodies accounting for about 50 per cent of the urban population as per the 2011 census.
- 6. The proposal calls for providing 100 days of guaranteed work at ₹500 a day. It also provides 150 contiguous days of training and apprenticeship at a stipend of ₹13,000 per month for educated youth. The programme thus creates opportunities for urban informal workers as well as for educated youth, giving

- the latter a chance to acquire work experience as well as skills while enabling them to address needs of their communities.
- 7. A large variety of works that require a range of education and skills may be undertaken through this programme. These include public works such as building and maintenance of roads, footpaths, and bridges; creation, rejuvenation, and monitoring of urban commons like water bodies, forest land, wetlands, and parks; monitoring, evaluation, and surveying of environmental quality, apprenticeship in municipal offices, public schools, and health centres; and provisioning of care for children and the elderly.
- 8. The relevant Urban Local Body (ULB), such as the Nagar Panchayat, Municipal Council, or Municipal Corporation, shall be the principal authority responsible for administering this programme. It shall identify projects, prepare annual works plans and implement the programme in a participatory manner by involving the ward committees and ward sabhas. The programme shall be administered by a set of dedicated staff starting from the level of the Ward.
- 9. To make it truly demand-driven, we propose that the annual estimated pool of Central government funds be transferred to the states at the beginning of each financial year. The state governments, in turn, would transfer the Central and the state share of the budget to the ULB so that funds are locally available. To ensure timely payment of wages, the wages would be disbursed in a decentralised manner at the local ULB
- 10. We propose proactive transparency and accountability structures such as mandatory periodic social audits and public hearing through a designated independent unit, as well as a mandatory grievance redressal architecture. The programme includes a 'right to timely grievance redressal' which ensures that the grievances of workers are addressed through Grievance Redressal Councils at the Centre and state levels, and dedicated Grievance Redress Officers at the ULB.
- 11. The total estimated programme budget would range from 1.7 to 2.7 per cent of GDP depending on whether employment is guaranteed to one adult from every household or every adult resident. We estimate that between 30 to 50 million workers in India's small towns will be eligible for employment through this programme.

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1 / Why an urban employment guarantee programme

1.1 / Rationale and benefits

India is facing a crisis of both quantity and quality of employment. Despite lack of recent official statistics, it seems clear, both from private data sources such as the Centre for Monitoring the Indian Economy (CMIE) as well as the leaked Periodic Labour Force Survey (PLFS) report of the National Sample Survey Organisation (NSSO), that the rate of open unemployment has steadily risen over the past few years¹. As per the PLFS 2017-2018, open unemployment stands at a historic high of 6.1 per cent, and unemployment among educated youth has reached 20 per cent. Unemployment in urban areas at 7.8 per cent is higher than the unemployment rate in rural areas (5.3 per cent) (Jha 2019a). In addition to this, Indian towns and cities continue to be plagued by the prevalence of low-wage, poor quality, informal work. PLFS data show that despite a rise in the prevalence of regular-salaried work, just over 50 per cent of the urban workforce remains either self-employed or in casual wage work (Jha 2019b).

At the same time that our towns and cities are facing a crisis of jobs, there is also a crisis of the quality of life due to ecological stress and lack of adequate public services. As malls, motorcycles, and mobiles proliferate, our streets are in disrepair, water-bodies are rapidly being degraded, green spaces are disappearing, the quality of air is deteriorating, and common spaces are shrinking (Mundoli, Unnikrishnan, and Nagendra 2017; Narain and Vij 2016). Thus, we see a dramatic divergence between the quality of private and public goods.

Centrally funded programmes like the Smart Cities Mission and Jawaharlal Nehru National Urban Renewal Mission (JNNURM) have disproportionately focused on development of bigger towns and cities (Zérah and Dennis 2017). Hence, it is important to re-focus our attention to improving the livelihoods and ecology of urban areas beyond India's major cities.

However, Urban Local Bodies (ULBs), which are largely responsible for developing and administering our towns and cities, find themselves unable to carry out their core tasks adequately due to lack of financial as well as human resources. Most ULBs in India are severely understaffed and are unable to hire more workers since they are financially restrained (ASICS 2017). A centrally funded programme that covers the wages of different kinds of workers will allow the ULBs to fulfil tasks they are mandated to perform but are failing to, because of a shortage of financial and human capacity. Further, the present staff of most ULBs are not fully suitable for performing the tasks related to the renewal of urban commons and monitoring urban environment. This programme can generate a new set of 'green jobs' that can strengthen the capacity of ULBs as well as promote sustainable urban development.

Creating jobs, improving the capacity of urban local governance, and supplying quality public goods and services requires serious public investment. But if made to an adequate extent, such investment has the potential to pay for itself many times over. Not only does it directly improve welfare by raising incomes and creating assets, there are many positive spillover effects too, such as:

- It increases demand by raising incomes directly, and indirectly in the informal sector, by improving the fallback position of workers
- It provides a better trained workforce to the private sector by allowing educated young workers to acquire skills and improve their employability

- The work undertaken will create assets that improve the town's ecology and quality of public services, which have a direct impact on productivity and quality of life
- It creates a shared sense of public goods in which every resident has a stake.

While cities and towns do not yet have an equivalent of MGNREGA, India has a history of urban employment schemes. One of the most prominent central programmes in this regard was the Swarna Jayanti Shahari Rozgar Yojana (SJSRY) launched in 1997 which provided employment to the unemployed and underemployed urban poor through self-employment and wage employment.² The Urban Wage Employment Programme component of SJSRY covered those living below the poverty line in ULBs with less than 5 lakh population. The SJSRY was replaced by the National Urban Livelihoods Mission (NULM) in 2013.3 This programme, and its subsequent version, laid more emphasis on self-employment and entrepreneurship than on wage employment. However, unlike MGNREGA, India's past urban employment schemes were not demand-driven and only a set of identified beneficiaries could avail their benefits.

More recently, the idea of an urban job guarantee has been gaining prominence in political and policy debates in India. According to news reports, an employment guarantee programme for urban areas has emerged as a core element of a possible Common Minimum Programme from the opposition parties for the 2019 General Election (Joy 2019). Further, the newly elected government in Madhya Pradesh recently announced a 100-day urban job guarantee scheme, the Yuva Swabhiman Yojana, which provides urban youth with varying educational qualifications with a wide set of jobs (Sirothia 2019). Since 2010, Kerala has also been running a programme called the Ayyankali Urban Employment Guarantee Scheme (AUEGS) which guarantees 100 days of wage-employment to an urban household for manual work.4

We are also witnessing a growing popularity of employment guarantee programmes across the world. For example, in the United States of America, employment guarantee is a core component of the 'Green New Deal', a set of policy proposals for addressing climate change and economic inequality, supported by several presidential candidates.⁵ It provides for a 'Green Job Guarantee' which enshrines 'a legal right that obligates the federal government to provide a job for anyone who asks for one and to pay them a liveable wage'. The Green New Deal proposes public expenditure of up to 8-10 per cent of GDP reflecting the scale of concerns as well as boldness of vision.

Further, an employment guarantee programme also strengthens the 'Right to Life' enshrined under Article 21 of the Constitution of India. As the Supreme Court of India has held in multiple cases, the 'Right to Life' is not restricted to mere existence but also includes the 'right to livelihood' and the 'right to live with human dignity.' In the last two decades several rights-based legislations have been introduced to further these constitutional ideals. In particular, the MGNREGA is a legislative realisation of the 'Right to Life' through a 'Right to Work'. A legally enforceable 'Right to Work' in urban areas appears to be a natural extension.

Finally, we note that the idea of a minimum or basic guaranteed income has gained traction in policy circles across developing and developed countries. The specifics differ from proposal to proposal but the key aspect is an unconditional cash transfer to some identified group of beneficiaries. While modalities of an income guarantee are worth debating, we believe that an employment guarantee has three key advantages over the former:

- 1. Employment guarantee schemes are generally self-targeting and demand-driven. In a country like India with scarce income data, an employment guarantee programme circumvents the complicated process of identifying beneficiaries.
- 2. Employment guarantee, such as the one proposed here, enables people to contribute productively to the creation of useful public goods and services.
- 3. An employment guarantee has the potential to foster active citizenry. It enhances engagement in democratic decision-making through public meetings and public hearings. On the one hand, it would increase people's political capacities in community building and on the other it strengthens local accountability.

1.2 / Lessons from MGNREGA

India has been a leader in the implementation of employment guarantee programmes with the MGNREGA that guarantees 100 days of work to any rural household that chooses to avail of it.

Critics of the programme argue that it is a waste of resources (Bhagwati and Panagariya 2014). However, there is evidence to suggest otherwise. In spite of the programme functioning at half its 100-day guarantee (average number of days worked per household has been around 45 days for the last five years) and despite the implementation challenges, it has had a far-reaching impact. Four broad positive aspects can be identified: an increase in rural incomes, gender and caste effects, community empowerment, and quality asset creation (Basole and Jayadev 2018). The popularity of the programme is also evident in the fact that growing rural areas sometimes prefer to remain rural, rather than be re-classified as 'urban' in part to avail of MGNREGA benefits.8

MGNREGA has served as a lifeline for the poorest with one out of every three rural households having worked in the programme. In 2017-18, close to 80 million (8 crore) people worked under MGNREGA. Data from the Employment-Unemployment Survey of the NSS show an eightfold increase in participation in public works in 2009–10 over 2004–05, confirming the impact of MGNREGA and other public employment programmes.

Based on a large-scale randomised experiment in Andhra Pradesh, Muralidharan et al (2018) show that the incomes of MGNREGA workers increased by 13 per cent and that overall poverty fell by 17 per cent. The authors mention that these findings are in synchrony with the SECC data of 2011. Moreover, 90 per cent of the income gains, according to their study, can be attributed to an increase in market earnings due to a spill-over effect of a well-functioning MGNREGA. Klonner and Oldiges (2014) showed that the Act has increased consumption among SC/ST households during the agricultural lean season by as much as 30 per cent and reduced poverty by about 50 per cent. Using a different methodology, an NCAER Report (Desai et al 2015), shows that 32 per cent of poverty reduction for participants is due to MGNREGA employment. And that more than 14 million households would have become poor without MGNREGA'. Himanshu and Kundu (2016) and several references therein, demonstrate that after stagnating for at least three decades, the growth in real rural wages (especially agriculture) picked up in 2007–08 following MGNREGA's inception.

Being the first programme to ensure wage parity for both men and women, MGNREGA has played a significant role in improving women's participation in the labour force and increasing financial inclusion among them. According to the NCAER report cited above, about 45 per cent female MGNREGA workers were either not working or worked only on a family farm in 2004–05. MGNREGA was thus the first opportunity for women to be part of a paid workforce. In fact, in the last five years, more than 50 per cent of the MGNREGA works were done by women. Azam (2012) shows that the daily wages for casual work for women increased by 8 per cent due to MGNREGA.

The planning of works for MGNREGA happens through a participation of the resident communities at the Gram Sabha (village councils). This, in turn, has given a platform and opportunity for the poorer and more vulnerable communities to engage in democratic participation. Veeraraghavan (2017) (and some references therein) shows the immense positive impact of MGNREGA both in terms of community participation among Adivasis and in terms

of improved bargaining power of Dalits. The study goes on to repose faith that the State and society can collaborate and produce positive outcomes. According to the 2011 Government of India census, SC/ST households form about 30 per cent of the rural population and largely constitute the poorest sections in the society. Around 40 per cent of the total households employed under MGNREGA every year belong to SC and ST Households.

Over the years, there has been a significant increase in the list of admissible works to include vermiculture, fodder production for livestock, horticulture, poultry and cattle sheds, and others through convergence with several departments. More than 20 million different assets have been completed under MGNREGA. Assets studied by Tewari et al (2011) and Esteves et al (2013) show that they have reduced the vulnerability of agricultural production, water resources, and livelihoods to uncertain rainfall, water scarcity and poor soil fertility. In a survey of over 4100 assets and over 4800 users across Maharashtra, Narayanan et al (2014), show that farmers viewed water conservation and harvesting works through MGNREGA as enablers of crop production and expanding area under cultivation. There are numerous other academic papers corroborating the immense improvement in rural lives due to good quality asset production. For example, for an economic evaluation of assets, one can refer to Aggarwal et al (2012) and Bhaskar and Yaday (2015).

Thus, MGNREGA has had far reaching consequences for rural livelihoods, incomes, gender and caste upliftment, participatory democracy and agriculture. Such learnings from MGNREGA can be positively leveraged for an urban programme. They also strengthen the case for guaranteeing urban employment.

Lessons can also be drawn for an urban programme from problems observed in MGNREGA implementation. Low daily wages and lack of political will have led to severe subversion of the rights of MGNREGA workers. The implementation has faced several related challenges including inadequate funds (Narayanan and Pothula 2018), delayed payments (Narayanan et al. 2017), and leakages (Vivek et al. 2018). For example, the payment processes in MGNREGA have become highly technical and excessively centralised, leading to issues such as diverted payments (one person's payments going to somebody else's accounts), rejected payments, and locked payments. A centralised payment architecture has adversely affected workers' democratic rights (Aggarwal 2017; Dhorajiwala 2018; Dréze 2018; and Nandy 2019). More recently, Munjuluri et al (2019) analysed over 10 million Aadhaar Payments Bridge System transactions for MGNREGA wages in Jharkhand and found that in about 39 per cent of the cases the wages are redirected to a completely different account. Thus there are sufficient reasons from move away from such a centralised payments architecture. Moreover, a lack of adequate funds has meant that the programme has become supply-driven, in contravention of the demand-driven nature of the Act.

In Section 3.3, we propose simpler alternative payments process and offer an idea on how to make the urban employment programme a genuinely demand-driven one.

2 / How Will an Urban Employment Guarantee Programme Work?

We now elaborate on the key aspects of the proposed programme. We emphasise that this is only one possible manifestation and we invite a public discussion on the various proposed aspects.

2.1 / Which Areas will be Covered?

This programme will cover Urban Local Bodies with a population less than 1 Million (10 lakhs) as per the latest census. Previous national-level urban programmes like the Smart Cities Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and Jawaharlal Nehru Urban Renewal Mission (JNNURM) have been relatively more focused on bigger towns and cities. This programme is primarily intended for about 4000 small and medium towns with less than 1 million residents and thus keeps all the major metropolitan cities as well as most state capitals out of its purview.

As per the 2011 census, 377.1 million people lived in urban areas, which is 31 per cent of India's total population. Of these 323 million (27 per cent) lived in areas under an Urban Local Body (called Statutory Towns) and 54 million (4.5 per cent) lived in areas considered urban by the Census but administered by panchayats (called Census Towns). Census Towns would not come under the purview of the present programme since MGNREGA already covers all areas which do not have an Urban Local Body (ULB). In 2011, cities with a population of less than 1 million accounted for 162.3 million people, or about 50 per centper cent of the urban population (and 13.5 per cent of India's total population).⁹

The programme will cover three kinds of towns:

Type 1 Towns - These are small towns with a population up to 50,000. They are mostly areas transitioning from rural to urban and are often governed by Nagar Panchayats.

Type 2 Towns - These are medium-sized towns with a population between 50,000 and 300,000. In most states, these are governed by Municipal Councils.

Type 3 Towns - These are cities with a population between 300,000 and 1,000,000, having a Municipal Corporation.

For illustrative purposes, we provide a list of different towns and cities under the three categories in Appendix A.

2.2 / What Types of Work will be Undertaken?

We propose that the programme will provide employment in a variety of works for people with a range of skills and education levels. Such works can address a wide range of issues in a variety of urban spaces such as streets, footpaths, bridges, tunnels, water-bodies (ponds, tanks, lakes), wells, wetlands, storm-water drains, canals, coasts and beaches, riversides, hill slopes and valleys, parks, protected areas, forest land and wooded groves, government managed areas of worship, historical monuments and heritage structures, playgrounds and open spaces, areas along roads and railway lines, below high tension wires and flyovers, slums, government

schools, anganwadis, colleges, hospitals, housing projects, and other unoccupied public lands.

Here is an indicative list of works. Appendix B provides a larger list of tasks and works that can be undertaken to promote urban ecological sustainability.

- a. Public works: Building, maintenance and upgradation of civic infrastructure like roads, footpaths, cycling paths, bridges, public housing, monuments, laying of cables, and other construction work. These are already being carried out by ULBs but it can be expanded with more funds under the new programme.
- b. Green jobs: Creation, restoration, and maintenance of urban common spaces, green spaces and parks, forested or woody areas, rejuvenation of degraded or waste land, cleaning of water bodies (tanks, rivers, nullahs, lakes). Work that can be undertaken here includes water conservation and harvesting, flood control, micro-irrigation, enhancing urban greenery, preventing coastal and hillside erosion, disaster management, enabling urban agriculture for subsistence and so on. These works will not only create jobs but will also improve the livelihoods of communities that are dependent on urban commons.
- c. Monitoring and Surveying jobs: Gathering, classifying, and storage of information on environmental quality and other aspects of quality of public goods. This will require easy to use equipment for data collection and software for data entry. This can provide both temporary employment as well as valuable skilling and work experience for educated youth. Accordingly, these positions can be for a continuous period of 150 days in a year (5 months), and with a different set of people hired each year. The information from the monitoring and data collection could feed into prioritising the kind of works that need to be done.
- **d. Administrative assistance:** Assisting municipal offices, local public schools, health centres and so on in administration or other ancillary functions, thereby freeing up the teaching or medical staff for core functions. These jobs can again be geared towards more educated workers, who can avail of this opportunity to build administrative, managerial and

record-keeping skills. These positions may also be for a continuous period of 150 days in a year.

e. Care work: Assisting regular public employees working in balwadis/aanganwadis or creches, providing child-minding services for parents working longer hours, assisted care for the elderly and various services for the differently-abled, such as reading to the visually challenged, assisting those with hearing or mobility impairment to manage various activities and so on. This addresses the problem of the urban poor with such needs often having to fend for themselves. Lessons could be drawn from the Kerala model of community-based part-time volunteers for palliative care. Such jobs will also lead to much-needed skilling for care services, which are going to become much more important in the future.

As can be seen, the programme would allow for the undertaking of a variety of works thereby providing jobs for people with a range of skills and education levels, as well as addressing a wide diversity of urban needs. Programme funds cannot be used to hire workers for manual cleaning of sewers and other such legally prohibited tasks. Further, all work undertaken via the programme must ensure basic standards of equal pay for men and women, availability of child-care, proper worksite facilities such as availability of potable drinking water, first-aid services, shade facilities, toilets and so on.

2.3 / Who can get Work?

A potential problem with an employment guarantee programme for urban areas is that it may increase migration from rural areas. If the aim of the programme is to create employment for urban residents, one way to ensure this is to restrict eligibility to those who can demonstrate domicile or resident status within the jurisdiction of the ULB via ration cards or other official documents. Since towns and cities are likely to have long-term residents whose families may reside elsewhere, the programme may allow for such residents who can prove domicile status as per state laws, to apply.

We propose two possible variations of the scheme. In Scheme 1, one adult member from every household

would be eligible to apply. In Scheme 2, every adult resident of the town would be eligible. The budgetary implications of each are discussed in Section 3.

A job card will be required to be eligible for this programme. The job card will also document any skills/education a worker may have, for example, mason, plumber, electrician, Bachelor of Arts in Psychology and so on. The job card would contain the following details about a worker - name, address, educational qualification, and specialised skills from a roster of possible skills. Once the job card details are entered in the programme implementation software, depending on the skill levels of the applicant, a set of possible job openings in the ULB would be available. Each time a person completes some work through this process, the job card would be updated along with the work details. The job card itself will act as the CV of the person for future work and skill building. There would be a provision that a job card holder must be able to get work within a stipulated time failing which an unemployment allowance would have to be paid.

Two broad types of workers can be identified.

Category 1: These are workers with varying levels of formal education up to Class 12 and informal skills, who currently work as construction labour and in other types of daily wage work, trades of various kinds such as masonry, painting, carpentry, plumbing, electrical works, gardening, child-care, elderly care, and so on. This is a considerable fraction of the urban and peri-urban workforce. The programme will raise their earnings as well as improve their conditions of work. Under Category 1 employment, the types of work undertaken can include standard public works as well as restoration of urban commons, and public provisioning of care. 100 days of work will be guaranteed.

Category 2: These are workers with a formal diploma or degree beyond the higher secondary certificate. These would include industrial training diplomas, various certificate courses in computing, English and so on, as well as Bachelors/ Masters degrees. Category 2 work may be envisioned in the form of an apprenticeship for a contiguous period of five months (150 days) in which the worker assists in the administrative tasks at Municipal Offices, Government Schools, Public Health Centres and so on, or is part of monitoring, evaluation, survey, or dataentry teams. The core idea for Category 2 work is to integrate a skilling programme within an employment guarantee programme. This will enable higher educated unemployed youth to gain work experience, acquire useful skills, and in the process earn some income.

To reiterate, Category 1 work is primarily aimed at addressing the issue of underemployment and low-wage informal work by providing additional employment opportunities with adequate wages and regulated working conditions. Work under Category 2 is primarily for providing some work experience, internship opportunities, and training to unemployed, educated youth. If the programme succeeds at attracting and skilling young people, they will also be able to use the certification from the programme to secure further opportunities in the private or public sector.

2.4 / How to Seek and Get Employment

Works will be administered via the ULB (nagar panchayats, municipal councils, and municipal corporations). Each ULB will have a designated facilitation centre with at least three trained staff members to register employment. The registration of work demand, date of the receipt, and the list of works would be available at the facilitation centre. Depending on the existing skill levels of the applicant, a set of possible works would be available. For each category of work, a work ID would be generated with a tentative work plan containing the number of person-days of work required. The facilitation centre would also have designated staff for registration of grievances. The aim is to strengthen urban local governance as well as assist ULBs in undertaking core functions.

2.5 / How will the Programme Affect the Present ULB Staff?

This programme seeks to address capacity gaps by augmenting the number of people working for the ULB. It seeks to supplement and not replace the present workforce employed at the ULB, either directly or through contractual arrangements. In case of existing permanent employees, the rollout of this programme will not affect their employment in any way. The vacancies for permanent staff of the ULB also cannot be filled by hiring under this programme. The workers employed under this programme will be paid by the ULB from the grants earmarked for the programme while the permanent employees will continue to be paid by the ULB through its regular sources of revenue.

For workers employed under contracts between the ULB and a private contractor, the rollout of the programme will not affect them while the contract is in force. In some cases, workers may be on short-term contract with contractors for performing specific tasks. Such workers would be eligible for this programme upon completion of the contract. When working under this programme the workers will be paid by the ULB from programme grants and not by the contractors. Each ULB can identify a list of contractual workers who are employed under short-term contracts so that they can be employed under this programme.

2.6 / Governance

The ULB is the principal authority responsible for administering this programme. The ULB shall be responsible for preparing the annual work plan, identifying the projects to be undertaken through this programme and implementing the identified projects and works. Each ULB will have a dedicated official in the form of a Chief Programme Officer who shall be responsible for administering the functions entrusted to the ULB. For Type 2 and Type 3 Towns, Additional Programme Officers may also be recruited by the ULB to administer this programme.

Furthering the idea of a decentralised and participatory form of democracy as envisaged by the 74th Constitutional Amendment, the ward can be empowered as the basic unit of governance vested with key functions. ¹⁰ Each ward can have a Ward Officer whose sole responsibility will be to supervise all the work carried out under this programme. For Type 1 and Type 2 cities, based on the population of the ward, a Ward Officer may be made responsible for two or more contiguous wards. Additionally, based on the specific demands of each ULB, one or more engineers and other technical officers may be appointed for designing and supervising the projects undertaken through this programme.

Every ward of the ULB will have a Ward Committee (a constitutionally recognised body consisting of the elected councillor of the ward and other members from civil society) which will identify the work to be undertaken through the programme and review the progress in monthly ward committee meetings. ¹¹ To ensure that the works under this programme are identified in a participative manner, the Ward Officer shall call for an annual meeting of the Ward Sabha to take inputs regarding the projects to be undertaken in the coming financial year. While the Ward Sabha consists of all adult members of the ward, this annual meeting is restricted to identifying the works under this programme and is hence specifically targeted at potential workers.

In case of Type 3 Towns, which have higher population in each ward, the Ward Officer may hold a set of Mohalla Sabha meetings instead of the Ward Sabha meeting to ensure that every person in the Ward has an opportunity to participate in the meeting. The works suggested by the Ward/Mohalla Sabha are to be noted down by the Ward Officer who presents it before the Ward Committee. The Ward Committee shall then identify the list of projects to be undertaken and prepare the budget estimates for the same in the form of a priority list. These will be submitted to the Chief Programme Officer at the ULB. The Chief Programme Officer can then make the Annual Works Plan and Budget based on demand from each ward and submit it to the council of the ULB for approval.

The ULBs shall be administratively answerable to the Urban Development Department of the concerned state government. Each state shall constitute a Programme Director housed at the Urban Development Department who is responsible for the overall administration and monitoring of this programme across the state. The state government shall be responsible for collating, reviewing and approving the annual work plans of all ULBs and sending the estimate of expenses of the programme to the central government. In the central government a dedicated Ministry of Employment may be made responsible for reviewing and approving the state plans under this project as part of a national strategy to address the employment problem. If such a ministry is not created, the Ministry of Housing and Urban Affairs at the central level may be made responsible for the overall administration of this programme (Figure 1).

Figure 1:



2.7 / Transparency and Accountability

Transparency and accountability are twin pillars for successful implementation of any public programme. Section 4 of the Right to Information Act, 2005, concerning mandatory and proactive disclosure of information shall be strictly adhered to in the implementation of this programme. The programme design can draw from structures envisioned by the Central Employment Guarantee Council (CEGC) in 2010. CEGC is a statutory body for the implementation of MGNREGA and has laid down the 'Minimum Principles of Transparency' (CEGC Report 2010) that have been accepted by the Ministry of Rural Development.¹²

For the implementing agency, an online Monitoring and Information system (MIS) would be put in place to record the flow and detail of every transaction. All the work details, shelf of works, the measurements, the list of workers and so on would be presented through such an MIS. Again, there are important lessons to be learned from MGNREGA in this regard. As Aggarwal (2017) indicates, in many situations, the MGNREGA MIS has become the de-facto implementing agency and thus a convenient tool to subvert worker rights. Care should be taken that software code does not override legal code. Hence some of the MIS design principles of MGNREGA should not be replicated here.

A well-functioning programme of this nature and scale should actively involve consultation with workers to suggest ways to improve their capacities and access to information. Information systems should have a worker-centric, inclusive, and compassionate design to enhance participatory democracy. Thus, as a start, a critical feature of this programme is the design and development of a bottom-up, worker-centric, worker-consulted, Janata Information System (JIS) whereby a worker's job card would have an easily accessible virtual counterpart. Since workers are actively involved in the production of information, it would be a right for them to have a stake in information presentation and dissemination mechanisms and to have access to their own work records on demand.

Like a bank passbook, the job cards would get electronically updated with the essential demographic details, work details, wage details, and bank account details at the facilitation centres. It will also act as a CV. As and when applicable, the job card would automatically be updated with the corresponding unemployment allowance and delay compensation (in the event of delays in wage payments) amounts due. Upon the completion of calculation of the total amount due to the worker, the job card would reflect the same for that corresponding work. As a back-up, workers will have the right to get a print-out of the electronic job card once every three months or after completion of 30 days of work, whichever is earlier. Workshops with workers would be conducted periodically to incorporate workers' inputs in improving their access to information and steps would be taken to enhance their capacities based on actionable information. To avoid a situation where an information system subverts legal rights, the JIS itself would be subject to periodic audits by the Comptroller and Auditor General (CAG).

Proactive disclosure would minimally include:

- 1. Reading out key pieces of information such as details about the work sites, budgets, expenditure, worker wages at the facilitation centres on the 1st and 3rd Saturday of each month.
- 2. Displaying periodically updated information through boards and wall paintings at the information facilitation centres at the wards.
- 3. Disseminating information using audio-visual tools such as voice broadcasts on the phone and SMS, and through radios and newspapers.

4. Free and open access to all the records on the internet.

For Category 1 workers, the wage disbursal would happen in in the presence of all the workers, at the Facilitation Centre, on the 1st and 3rd Saturday of each month. Wage disbursal would be accompanied with a mandatory printed 'wage slip' containing the essential details such as (1) the worker's job card details (2) the dates of work (3) the muster roll number (CEGC Report 2010) that have been accepted by the Ministry of Rural Development. (4) the total wages earned and (5) the date of wage disbursal. A copy of all this would be automatically updated in the job card as well.

For Category 2 workers, a monthly stipend would be deposited to their bank accounts directly on the last working day of the month.

Transparency is not an end in itself. Transparency mechanisms are put in to foster good accountability and governance that can at least be built in two ways. Proactive accountability is to ensure that implementation proceeds as envisioned. This can be achieved through mandatory and regular social audits. Reactive accountability addresses implementation lacunae via robust grievance redress structures.

2.8 / Mandatory Social Audits

Social audits are a process of verification of the implementation of the programme in consultation with the community. The Ward Officer will conduct concurrent social audits for all the work done each month. The details of all the work in the wards, the expenses incurred (both labour and material), the details of material sourcing, bills and vouchers will be proactively displayed in the public domain and will also be available at the facilitation centres for citizens to see and to take photocopies. Oral testimonies of people would be collected in addition to documentary verification and discussed with the citizens in public. The broad objectives of social audits are: (1) Ensure transparency and accountability (2) Inform and educate people about their rights and entitlements under the programme (3) Create regular, shared and collective platforms for the workers and the community to freely voice their grievances (4) Enhance participation and hence ownership in the programme implementation

and (5) Build capacities of stakeholders/participants of the social audit process.

An independent Social Audit Unit (SAU) would be set up by the state governments to facilitate the conduct of social audits at each ward. 3 per cent of the total allocated funds should be reserved for social audits. SAU resource persons would be identified and trained for this unit. For example, one ULB Resource person would be selected and trained in the audit processes. Every town can have a trained pool of social auditors who would be randomly assigned to conduct social audits making sure that an auditor is not assigned one's own ward. The audits would be carried out once every quarter in each ward by a team of four social auditors and the ULB Resource person for that ward. Since all the required details would be proactively made available in the public domain, the social auditors need not necessarily depend on the local ULB for any other data.

The programme should adhere to the minimum principles of the auditing standards of social audits, formalised by the CAG.¹³ The minimum principles, can be classified under the following heads:

- 1. Access to Information
 - a. Understanding Entitlements -- Disclosure of job charts, time frames and responsibilities of each official in the programme
 - b. Equal and open access to information
- c. Mandatory display and dissemination of information
- 2. Involvement and participation of citizens in the process of open decision making
- 3. Protection of citizens
- 4. Right to be heard through multiple modes
- 5. Collective platforms to be overseen periodically by independent ombudsperson(s)
- 6. Public Hearing and dissemination -- at the end of the social audit in each quarter, a public hearing will be organised outside the Ward Office. It would be mandatory for the Ward Officer and the technical team at the ULB to attend the Public Hearing. The findings of each social audit would be publicly disseminated and available at the ward office. Each SAU would itself be subject to periodic audits by the CAG.

2.9 / Grievance Redressal

A Grievance Redress Commission would be set up at the national and the state level with a Grievance Redress Officer (GRO) at each Ward. Such a GRO would be at the level of the Ward Officer. The Grievance Redress Commission would be an independent body dedicated to conduct inquiries, verification, and inspection of each registered grievance.

The GRO would ensure the creation of multiple channels of registration of grievances -- a kiosk at the GRO's office, toll-free number, online option, and so on. Every grievance registered would get a dated receipt. In addition, the programme would contain a 'Right to Timely Grievance Redressal'. Enquiry, verification, and inspection of each grievance must be completed within seven working days of receiving the grievance. The enquiry and verification process would comprise an independent team of three members: one member of the social audit team and two members of the grievance redressal team. After completion of each step in the grievance redress process, the complainant would be notified in person. The grievance would be considered closed only when there is a written notification by the complainant that the grievance has been resolved. There would be penalty clauses created in case of a delay in timely resolution of grievances or failure of redressal in genuine cases. There will be appellate authorities created for grievance redressal procedures. A worker, unsatisfied with the grievance redressal procedure could appeal to a higher appellate authority who will oversee resolution in a time bound manner.

Upon completion of verification and inspection, the grievance must be resolved within seven more working days. Thus, every grievance must be resolved within 15 days of receiving the grievance.

3 / Programme Budget

We now discuss the programme wage, number of people covered, and the resulting budget. As with programme structure elaborated above, this is an illustrative exercise that is presented for further discussion and debate.

3.1 / Calculation of Wage Rate

A point of reference for setting programme wages comes from the wage structure observed for broad occupational categories in the CMIE Consumer Pyramids survey. We choose three occupations, casual wage work, self-employed entrepreneurs in the informal sector (people in various kinds of trades) and white-collar clerical workers. The first two are likely to sign up for work under Category 1. The last occupational type is closest to Category 2 work. According to these data, median earnings reported by casual wage labourers in urban India in 2018 were ₹9625 per month or 370 per day assuming a 26-day working month. Self-employed informal entrepreneurs reported median monthly earnings of ₹12,500 or 480 per day. While white-collar clerical workers reported median earnings of ₹28,125 per month or 1082 per day. ¹⁴

In addition, we note that the overall median daily wage (across all occupations) in urban India in 2018 was ₹500 per day.

The second point of reference for setting a programme wage is the recently proposed national floor minimum wage of ₹375 per day as well as the recent Ministry of Labour and Employment Government Order dated 28/09/2018 that gives minimum wage rates plus variable dearness allowance for a variety of occupations covering most activities that can be undertaken in this programme.¹⁵ For Type B areas (intermediate towns) the proposed 'unskilled', 'semi-skilled' and 'skilled/clerical' rates are 466, 527, and 617 per day, while for Type C towns (smallest towns) they are 373, 437, and 527 respectively.

Taking these two points of reference and keeping the scheme simple in view of administrative constraints, we propose a wage rate of ₹500 per day for Category 1 workers, and the same rate converted into a monthly stipend of ₹13,000 for Category 2 work (work requiring continuous presence of a person with a diploma or degree). Since Category 2 work is envisioned as a skilling or training apprenticeship programme for youth with diplomas or degrees beyond Class 12, it need not pay in accordance with market rates. This is also why we refer to the payment as a stipend rather than a wage or salary. The wage structure will be the same for men and women, following the gender parity norm established under MGNREGA. Wages would be indexed to CPI-U. The base wage rate may be adjusted upwards based on cost of living considerations.

Setting the programme wage equal to the median urban wage, would raise earnings significantly at the bottom of the distribution. One criticism of this approach may be that as wages exceed the current market rates this will raise the cost of labour for local employers making some of their operations unviable, resulting in job losses. On the other hand, low wages are widely acknowledged to be the principal problem facing urban informal workers. A rise in wages for this section of the workforce would have significant demand effects, including increased demand for goods and services provided by local entrepreneurs. This question has been extensively explored in the context of minimum wage laws in developed countries. The research over the effects of a rise in minimum wages in the US, the UK, and other developed economies points to a positive role for demand, while the negative effects in terms of loss of jobs are either small or non-existent (de Linde Leonard, Stanley, and Doucouliagos 2018; Manning 2016; Neumark and Wascher 2008). While these findings cannot be straightforwardly extended to the Indian context, to the extent that informal labour markets are imperfect with employers having some market power, the effects may be similar. Lastly, we also point out that instead of accepting low wages as the default mechanism for survival of small entrepreneurs, public policy should encourage increased productivity that can sustain higher wages while maintaining profit margins.

3.2 / Calculation of the Budget

Here are our budget projections for guaranteed employment for 100 days (Category 1) and 150 days (Category 2) of the year. Appendix C has the detailed calculations.

The total budgetary requirement will have three components - labour, material, and administrative cost. We propose a 60:40 ratio, that is, 60 per cent of the total budgetary allocation would be labour cost and 40 per cent would be a combination of material and administrative cost. Labour costs should be split between the Centre and the states in a 80:20 ratio, while the non-labour costs would be shared between the Centre, the states, and the ULBs. Payment of penalties to workers in case of delays in wage payments (delay compensation) would thus be proportionately allocated to the Centre and states depending on who is causing

the delay. In case of Type 1 cities, the smallest and most resource constrained, the non-labour costs will be shared between the Centre, State and ULB in the ratio of 50:40:10. For Type 2 cities it will be in the ratio of 50:30:20 and Type 3 cities, the largest, in the ratio of 50:25:25 . The sharing scheme is intended to create a sense of ownership of the programme across all three levels of government.

The programme should also encourage convergence with other central and state government programmes for urban development. In such cases, while the labour cost may be completely covered by this programme, the material and administrative costs may be covered as per the terms of the other programmes. For example, if a ULB is laying new pipes for water supply under the AMRUT programme, the material costs may be paid by the central government as per the terms of AMRUT but for the payment of wages, the ULB may avail of funds from the Urban Employment Guarantee Programme.

The total estimated labour costs depend on the number of people expected to make themselves available for work. We have estimated this number based on the 2018 CMIE Consumer Pyramids Survey. Data show that 50 per cent of workers earn up to □500 per day in urban areas. Data also show that around 25 per cent of the urban workforce has a diploma or degree beyond Class 12. Using these numbers, we present two possible schemes, one where one adult from every household is guaranteed work and one where every adult resident of a town is guaranteed work.

Scheme 1: Household

In order to calculate the potential workforce under the programme we start with the projected population for 2018 which is 1.3 billion. ¹⁶ Applying an urbanisation rate of 35 per cent gives us a total urban population of 474 million. ¹⁷ Given that roughly 50 per cent of the urban population resides in towns of less than 1 million, we get a small-town strength of 237 million. Assuming an average household size of four, gives us an estimated 59 million households. One worker from each household gives a total possible workforce of 59 million or 5.9 crore.

If we assume that all workers earning less than the programme wage will demand work for the entire

period, we get a Category 1 workforce of around 30 million (half the total possible workforce). For Category 2 work, only the higher educated qualify and in addition we assume that only the openly unemployed are likely to sign up since a continuous presence of five months is required. Using an unemployment rate of 20 per cent (the PLFS rate for the higher educated), we get an estimated 3 million workers. The programme cost in this case works out to a total of 2.8 lakh crores or 1.7 per cent of GDP (see Appendix C).

To put this number in perspective, note that if every job card holder under MGNREGA (~70 million) was to get the full 100 days of employment at a wage rate of \$\textstyle{1200}\$ per day, the programme cost would be 2.3 lakh crores (1.4 per cent of GDP). Further, the World Bank noted that MGNREGA should be funded to the extent of 1.7 per cent of GDP (Murgai and Ravallion 2005). This programme is in the same range.

Scheme 2: Individual

Instead of guaranteeing employment to only one adult from every household, it would be preferable for the scheme to cover every adult resident, which was the original vision behind the Right to Work campaign too. If this option is followed, the total possible worker pool would be 94.5 million or 9.4 crore. This number is obtained by starting from the estimated Indian working age population in 2018 (900 million), calculating the small-town fraction (14 per cent) and applying a labour force participation rate (LFPR) of 75 per cent. This LFPR is much higher than the observed average of around 50 per cent as per the PLFS. This is because India's low overall LFPR is driven largely by a very low participation rate for women, and a central aim of the proposed programme is to encourage participation of women in the workforce.

As before, assuming that all workers eligible for Category 1 will sign up and around 20 per cent of those eligible for Category 2 will do so, we obtain a total programme budget of 4.5 lakh crores, i.e., 2.7 per cent of GDP. (See Appendix C for details)

The programme costs may seem high but we emphasise the positive spill-over effects that will result from higher wage rates, skilling components and the strong element of public goods creation. Thus, it is more an employment, skilling, and an asset creation

programme in one. Finally, we have assumed that the entire bottom half of the urban wage distribution will demand work. We have also assumed a large LFPR for Scheme 2. These are strong assumptions and the actual demand for work, and thus the actual costs will likely be lower.

3.3 / Budget Planning

According to Section 2.6, by December of each year, the state will submit its labour budget to the Centre by aggregating the labour budget of each ULB in that state. The labour budget will contain the planned person-days of work required for the next financial year. We propose a departure in the method of funds allocation from a centralised payment architecture of MGNREGA. Inadequate funds allocation has made MGNREGA a supply-driven programme. For instance, in 2018-19, MGNREGA funds were exhausted three months before the end of the financial year. Some state governments, such as the Government of Karnataka, have attempted to clear pending wage payments from their own exchequer based on a promise of reimbursement for the same from the Central government. However, news reports indicate that the Central government is yet to pay arrears to the tune of ₹950 crores from 2015-16 (CNBC TV18, 2019). Moreover, as we outlined in Section 1.2, a highly technical and centralised wage payment system has only added to worker woes instead of easing the wage payments process. In such situations, workers are confronted with an opaque system where the baton of accountability is being passed around from the field functionaries to a 'computer'.

3.4 / Funds Allocation and Sharing

To honour a truly demand-driven programme, at least two things are critical. First, an inventory of work should be planned well in advance. Second, funds should be made available whenever there is a demand for work. In addition, wage payments should be made on time to be compliant with the Payment of Wages Act (1936). The planning and submission of the labour budget at each ULB takes care of the first aspect of the demand-driven principle. The following example illustrates the second and third aspect of the demand-driven principle.

Consider a ULB in a Type 3 (largest) town. For such a ULB, the Centre's share of labour cost is 80 per cent and the state government's share is 20 per cent. For non-labour costs, the Centre's share is 50 per cent, the state government's share is 25 per cent and the ULB's share is 25 per cent. Suppose that the labour budget (in person-days) of this ULB translates to a total monetary requirement of Rs 1000 for one financial year. Labour costs would account for ₹600 (60 per cent) and non-labour costs would account for ₹400 (40 per cent).

In the first week of April in each financial year, the Centre would earmark and transfer ₹480 for labour wages (80 per cent of ₹600) and ₹200 (50 per cent of non-labour wages) to the state government's account. Similarly, each respective state government would earmark and park ₹120 (20 per cent of the labour wages) and ₹100 (25 per cent of the non-labour costs) to be transferred to the ULB's account. Therefore, at the beginning of each financial year, the state government's account will have the total of the Centre's share and the state government's share required for the entire year. The state government will transfer money to the ULB in 4 tranches, one tranche per quarter. All tranches, after the first would be transferred based on a utilisation certificate to be provided by each ULB to the state government. Such a utilisation certificate would explain how the allocated funds were used in a given quarter. Based on a quarterly utilisation, the state government will transfer the funds to the ULB's account. Finally, the ULB will have earmarked and stored ₹100 (25 per cent of the non-labour costs) in its account. Care should be taken that no wage payment to a worker is withheld due to any delays in production and verification of the utilisation certificates.

There could at least be two legitimate concerns in this model. First, that ULBs might overestimate their labour budget requirements and thereby seek more funds than required. To address this, we propose two critical checks. First, once every quarter, the ULB will have to submit a utilisation certificate demonstrating the cost incurred during the period. Any unused amount would be accounted for and adjusted proportionately between the Centre and the states prior to the allocation of funds in the next quarter. Second, the ULB would not just be subject to a periodic social audit but also a quarterly financial and utilisation audit. This

would also be under the CAG norms. The second concern could be that introduction of the state government and the ULB as intermediaries in the payment process might cause leakages. While this cannot be overruled, we postulate that this mechanism of financial management and funds transfer would increase local accountability, decentralisation and the state government's and the ULB's stake in the programme implementation.

Our proposal could address four key failings of MGNREGA:

- 1. The urban employment guarantee programme would be genuinely demand-driven because funds for programme implementation are locally available throughout the year.
- 2. Giving monetary freedom to the state governments and the local ULBs would ensure better possibilities of timely wage payments.
- 3. This would ensure greater local accountability. In case of delays in payments, the workers would know that the ULB has the financial means to pay the workers.
- 4. In MGNREGA, the Gram Panchayat has been rendered quite powerless with the centralised payment systems. This discourages effective implementation. With greater local autonomy, through upfront decentralisation of funds, the state government and the ULB would have more stake in better programme implementation.

3.5 / Payment of Wages

For each work in a worksite, there will be a muster roll containing the job card details of the applicant, the work details and the attendance at the worksite. Each muster is weekly and at the end of the week, the wages for each worker, based on attendance is uploaded at the facilitation centre. Suppose T denotes the date of completion of a muster. Then the measurement for that muster of work must be completed within four working days, that is, by T+4. Then the work details and the corresponding pay order for that work must be generated by T+8. The pay order would be electronically sent to the ULB by T+10. The ULB would then disburse the cash/cheque/receipt of electronic transfer to the workers by T+15. Wage disbursement must happen on the first Saturday and the third Saturday of each month at the Ward office. The job card of each worker must have the provision to be electronically updated at the facilitation centre during wage disbursal day. As an option, instead of provision of a wage slip, the updated job card with the record of work and wages could be printed and provided.

3.6 / Delay Compensation

In case of a delay in payments, each worker will be eligible for a compensation. The compensation must be calculated for the full extent of delay - from the 16th day of closure of the muster roll to the date on which wage disbursal happens at the ULB. Since the ULB will have access to the full labour costs at the beginning of the financial year, the delay compensation would be borne entirely by the ULB. However, if the Centre or the state governments fail to transfer their amounts corresponding to the labour budget, the Centre and/or the state governments would be liable to pay the delay compensation.

4 / Conclusion and Way Forward

Criticisms of an urban employment guarantee scheme that have recently been made are that it does not aid India's structural transition from rural to urban and from low-productivity to high productivity work. ¹⁸ It is true that a jobs guarantee programme cannot make the growth process distributionally more equal by itself. But the programme that is implicitly assumed in this criticism is simply a direct extension of MGNREGA to urban areas. As we have outlined here, an urban programme can, and perhaps should, take a very different form. If an ambitious urban employment guarantee programme along the lines proposed here is implemented, it has the potential to transform the structure of the economy as well as contribute significantly to an improved quality of life for millions of people.. Specifically, the following effects may be envisaged on the economy at large:

- 1. A multiplier effect resulting from reduced unemployment and underemployment and increased incomes. This will boost demand in small towns and create conditions for successful entrepreneurship in a distributed fashion.
- 2. Increased productivity as well as improved quality of life due to better functioning public goods and services.
- 3. Increased employability and productivity in the private sector due to skilling in the programme.
- 4. Rising informal sector incomes due to an effective wage floor.
- 5. Reversal of ecological degradation.

The key steps involved in the rollout of such a programme are:

- 1. Passage of a National Urban Employment Guarantee Act This Act will legally bind the state to provide a fixed number of days of work for all eligible people who apply under the programme, lay down the governance structure for administering the programme, and provide accountability mechanisms for its operation.
- 2. Creation of a Ministry of Employment We propose that this programme be administered by a newly created Ministry of Employment under the Government of India. Such a Ministry will be responsible for all matters related to employment generation including the administration of MGNREGA.
- 3. Establishing functionaries for administering the programme The Central and state governments have to hire, through an open process, a set of dedicated staff who are responsible for administering this programme as well as staff responsible for accountability measures under this programme.

We believe that the time is right for India to embark on this path.

Endnotes

- 1. See "Recent Trends in Employment and Unemployment in India", State of Working India 2019.
- 2. An antecedent to the SJSRY was the 'Nehru Rojgar Yojana' introduced in 1989.
- 3. The NULM was further restructured and renamed as the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) in 2016.
- 4. Local Self Government Department, Government of Kerala (http://lsgkerala.gov.in/index.php/en/schemes/ayyankali_urban_employment_guarantee_scheme)
- 5. The Green New Deal seeks to provide everyone with "(i) high-quality health care; (ii) affordable, safe, and adequate housing; (iii) economic security; and (iv) access to clean water, clean air, healthy and affordable food, and nature." House Resolution.0109,116th Congress (https://ocasio-cortez.house.gov/sites/ocasio-cortez.house.gov/files/Resolutionper cent20onper cent20aper cent20Greenper cent20Newper cent20Deal.pdf)
- 6. In *Olga Tellis v. Bombay Municipal Corporation* (1985 SCC (3) 545) the Supreme Court held that "An equally important facet of the right to life is the right to livelihood because no person can live without the means of livelihood."
- 7. In *Maneka Gandhi v. Union of India* (1978 SCC (1) 248) the Supreme Court held that "The right to live includes the right to live with human dignity and all that goes along with it...and also the right to carry on functions and activities as constitute the bare minimum expression of human self".
- 8. There is a trend among census towns and other urbanising villages to remain administratively rural. While some of the reasons for the resistance to be classified as urban is to avoid higher taxes and tighter building regulations, Eric Denis, Partha Mukhopadhyay, Marie-Helene Zérah (2012) have noted "rural schemes, such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the world largest programme of this nature, are a strong incentive for settlements to remain rural"
- 9. As per the 2011 Census, 53 cities have a population of over 1 million which account for 160.7 million persons or 42.6 per cent of the urban population.
- 10. The 74th Constitutional Amendment, passed in 1992, added Part IX A "The Municipalities" into the Constitution of India. It mandated the creation of elected local governments in urban areas and sought to empower them through the devolution of functions, funds and functionaries.
- 11. Article 243-S of the Constitution, introduced by the 74th Amendment, states that every Municipality having a population of three lakhs shall have Wards Committees. While it does not restrict Municipalities below this population to have Ward Committee, this provision has been poorly implemented since most ULBs, above and below 3 lakh population, do not have functioning Ward Committees.

- 12. http://nrega.nic.in/CEGC/TransparencyandAccountability.pdf
- 13. http://nrega.nic.in/netnrega/writereaddata/Circulars/1948Social_Audit_.pdf
- 14. Income data are obtained from the second wave (May to Aug) of the 2018 CMIE Consumer Pyramids survey, the most recent wave for which full data are available. The numbers presented pertain to all of urban India and not only small towns.
- 15. Report of the Expert Committee on Determining the Methodology for Fixing the National Minimum Wage, https://labour.gov.in/sites/default/files/Commitee_on_Determination_of_Methodology.pdf. And VDA Minimum Wages order dated 28/9/2018: https://clc.gov.in/clc/node/586
- 16. World Population Prospects: The 2017 Revision, United Nations Department of Economic and Social Affairs: https://www.un.org/development/desa/publications/world-population-prospects-the-2017-revision.html
- 17. Urbanisation rate as per census 2011 was 31per cent. In view of the rapid urbanisation in the last decade, we have adjusted it upwards to 35 per cent.
- 18. https://www.hindustantimes.com/editorials/urban-employment-guarantee-scheme-signifies-india-s-failure-to-address-inequality/story-WdvzySh9GyaRuodCAMCyNP.html

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Annexure - A

Type 1 Towns (Up to 50,000 population)

Adoor (Municipality), Kerala Afzalpur (Town Panchayat), Karnataka Belonia (Municipal Council), Tripura Chirkunda (Nagar Panchayat), Jharkhand Degana (Municipal Council), Rajasthan Golaghat (Municipal Board), Assam Kovvur (Municipality), Andhra Pradesh Kalimpong (Municipality), West Bengal Lalganj (Nagar Panchayat) Uttar Pradesh Mhowgaon (Nagar Panchayat), Madhya Pradesh Mapusa (Municipal Council), Goa Nakodar (Municipal Council), Punjab Nelamangala (Town Municipal Council), Karnataka Poonch (Municipal Council), Jammu and Kashmir Rania (Municipal Committee), Haryana Rameswaram (Municipality), Tamil Nadu Soro (Municipality), Odisha Sugauli (Nagar Panchayat), Bihar Tuljapur (Municipal Council), Maharashtra Vadnagar (Municipality), Gujarat

Type 2 Towns (50,000 - 300,000 population)

Anantapur (Municipal Corporation), Andhra Pradesh
Begusarai (Municipal Council), Bihar
Bhiwani (Municipal Council), Haryana
Cooch Behar (Municipality), West Bengal
Dewas (Muncipal Corporation), Madhya Pradesh
Dhamtari (Municipal Corporation), Chhattisgarh
Gandhinagar (Municipal Corporation), Gujarat
Imphal (Municipal Corporation), Manipur
Kohima (Municipal Council), Nagaland
Kottayam (Municipality), Kerala
Margao (Municipal Council), Goa

Mirzapur (Muncipal Corporation), Uttar Pradesh Port Blair (Municipal Council), Andaman and Nicobar Islands

Ratnagiri (Municipal Council), Maharashtra
Raichur (City Municipal Council), Karnataka
Rishikesh (Municipal Corporation), Uttarakhand
Shimla (Municipal Corporation), Himachal Pradesh
Silchar (Municipal Board), Assam
Thanjavur (Municipal Corporation), Tamil Nadu
Tonk (Municipal Council), Rajasthan

Type 3 Towns (300,000 - 1,000,000 population)

Ajmer (Municipal Corporation), Rajasthan
Bhilai (Municipal Corporation), Chattisgarh
Bhubaneswar (Municipal Corporation), Odisha
Dehradun (Municipal Corporation), Uttarakhand
Erode (Municipal Corporation), Tamil Nadu
Gaya (Municipal Corporation), Bihar
Jammu (Municipal Corporation), Jammu and Kashmir
Kolhapur (Municipal Corporation), Maharashtra
Kozhikode (Municipal Corporation), Kerala
Kurnool (Municipal Corporation), Andhra Pradesh
Mangalore (Municipal Corporation), Karnataka
Mathura-Vrindavan (Municipal Corporation) Uttar
Pradesh

Patiala (Municipal Corporation), Punjab
Rohtak (Municipal Corporation), Haryana
Rourkela (Municipal Corporation), Odisha
Salem (Municipal Corporation), Tamil Nadu
Siliguri (Municipal Corporation), Wet Bengal
Thiruvananthapuram (Municipal Corporation), Kerala
Tirupati (Municipal Corporation), Andhra Pradesh
Warangal (Municipal Corporation), Telangana

Annexure - B

The following list of potential works that can be undertaken in the programme is based on Mundoli, Manjunath, and Nagendra (2015, 2017, 2018), Mundoli, Unnikrishnan, and Nagendra (2017a, b), Nagendra (2016), Unnikrishnan et al (2016), Vij and Narain (2016), Narain and Vij (2016) and on other unpublished work.

Works are aimed at addressing urban environmental issues such as:

- Water conservation and harvesting
- Flood control
- Enhancing urban greenery (reducing air and water pollution, maintaining urban micro-climate, biodiversity support, residents well-being, supporting biodiversity): Planting in public spaces especially where space is not a constraint e.g. roadside should be mostly keystone species like Ficus, or local fruiting trees like mango, jackfruit, tamarind, which are hardy, require less maintenance, long lived and do not need much watering
- Preventing coastal and hillside erosion of cities/towns situated in such specific ecological landscapes
- Disaster management
- Enabling urban agriculture for subsistence
- Enabling livelihoods
- Recreation
- Biodiversity support

Possible List of works :

Space	Purpose	Actions	Description
Waterbodies (ponds, tanks,	Water conservation	Construction	Construction of smaller tanks in lakes (for idol immersion)
lakes)	Flood control Biodiversity support	Repair Maintenance	Maintenance of bunds, deweeding, desilting, garbage/waste removal, fencing or repairing boundary walls and fences
			Less reliance on STPs—reclaiming and rejuvenating wetlands
Waterbodies (ponds, tanks, lakes)	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting, Maintenance Removal	Planting vegetation suited to water-bodies, including trees where ecologically suitable, and otherwise, planning native plant species Rejuvenating grasslands, Maintenance, for example loping and removal of dead trees; but with care to not affect hydrology

Space	Purpose	Actions	Description
Waterbodies (ponds, tanks,	Supporting livelihood	Construction	Floating wetlands that can be used to harvest reeds which can be used
lakes)		Repair	by local women's self-help groups to make reed baskets, mats
		Maintenance	·
Open wells	Water conservation	Construction	Sinking new wells, reviving disused wells, dredging
		Repair	
		Maintenance	
Wetlands	Water conservation	Maintenance	Cleaning weeds and garbage
	Flood control		Less reliance on STPs—reclaiming and rejuvenating wetlands
	Biodiversity support		
Wetlands	Supporting livelihood	Construction	Floating wetlands that can be used to harvest reeds which can be used
		Repair	by local women's self-help groups to make reed baskets, mats
		Maintenance	
Water channels including	Flood control	Construction	Desilting, cleaning weeds and garbage
stormwater drains		Repair	
di di i i		Maintenance	Constructing to aid flood control
Canals	Water conservation	Construction	Cleaning weeds and garbage
		Repair	Maintenance of bunds, deweeding,
	Flood control	Maintenance	desilting, garbage/waste removal, fencing or repairing boundary walls
	Biodiversity support		and fences

Space	Purpose	Actions	Description
Canals	Enhancing urban greenery (reducing air	Planting Maintenance	Planting vegetation suited to canalside strengthening, including trees where ecologically suitable,
	and water pollution, maintaining	Removal	and otherwise, planning native plant species.
	urban micro- climate, residents well-being, supporting biodiversity)		Maintenance, for example loping and removal of dead trees; but with care to not affect hydrology
	Preventing erosion		
Canals	Supporting livelihood	Construction	Floating wetlands that can be used to harvest reeds which can be used
		Repair	by local women's self-help groups to make reed baskets, mats
		Maintenance	
Coast/ beachfronts	Preventing coastal erosion	Construction	Construction, maintenance of mangroves wherever possible, supple-
		Repair	mented with built structures such as groynes and other structures
		Maintenance	
Coast/ beachfronts	Disaster management	Construction	Construction and maintenance of cyclone shelters
		Repair	
		Maintenance	
Coast/ beachfronts	Enabling coastal	Construction	Fish drying and processing sites
	livelihoods	Repair	
		Maintenance	
Riverside	Water conservation	Construction	Construction, maintenance and repair of riverside bunds, desilting,
	Flood control	Repair	deweeding and removing garbage
	Biodiversity support	Maintenance	

Space	Purpose	Actions	Description
Riverside	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees; but with care to not affect hydrology.
	erosion		
River/riverside	Supporting livelihood	Construction	Floating wetlands that can be used to harvest reeds which can be used
		Repair	by local women's self-help groups to make reed baskets, mats
		Maintenance	to make reed baskets, mats
Hill slopes and valleys	Enhancing urban greenery	Planting	Planting appropriate vegetation, including ecologically suitable local
	(reducing air and water pol-	Maintenance	species of trees where relevant, maintenance, for example loping
	lution, main- taining urban micro-climate,	Removal	and removal of dead trees
	residents		
	well-being,		
	supporting biodiversity)		
	Preventing erosion		
Hill slopes and	Water	Construction	Constructing and maintaining
valleys	conservation	Repair	structures to control and hold flow of water; including water
	Flood control		harvesting
		Maintenance	

Space	Purpose	Actions	Description
Parks (large and small neighbourhood parks)	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees Focus on less landscaping and more planting of trees
Protected areas, forest land and wooded groves within cities	Enhancing urban greenery (reducing air and water pol- lution, main- taining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Government managed areas of worship – temples, churches, mosques, etc	Water conservation	Construction Repair Maintenance	Construction rainwater harvesting tanks Maintenance of ponds and tanks—deweeding, desilting
Government managed areas of worship – temples, churches, mosques, etc	Enhancing urban greenery (reducing air and water pol- lution, main- taining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees

Space	Purpose	Actions	Description
Roadsides	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Wooded graveyards and crematoriums	Enhancing urban greenery (reducing air and water pol- lution, main- taining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Playgrounds and open spaces	Recreation	Construction Repair Maintenance	Construction of facilities for different games in playgrounds and maintenance
Alongside railway lines	Enhancing urban greenery (reducing air and water pol- lution, main- taining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees

Space	Purpose	Actions	Description
Below high tension wires and along buffer areas of land left aside for electric works	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Below flyovers	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
In the buffer areas around airports, ports and other similar facilities	Enhancing urban greenery (reducing air and water pol- lution, main- taining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Other unoccupied public lands	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro-climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees.

Space	Purpose	Actions	Description
Slums	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting trees that provide shade as well as nutrition (e.g. drumstick, fruiting trees) and medicinal plants, maintenance, for example loping and removal of dead trees.
Slums	Enabling urban agriculture for subsistence	Planting Maintenance Removal	Individual and community farming, creating kitchen gardens with medicinal plants and greens to supplement nutrition
Slums	Water conservation	Construction Repair Maintenance	Construction of rainwater harvesting and storage for individual homes and for slum as a whole
Government schools and anganwadis	Water conservation	Construction Repair Maintenance	Construction of rainwater harvesting and storage facilities
Government schools and anganwadis	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees

Space	Purpose	Actions	Description
Government schools and anganwadis	Enabling urban agriculture for subsistence	Planting Maintenance	Individual and community farming, creating kitchen gardens with medicinal plants and greens to supplement nutrition
Government educational institutions (PU colleges/Uni- versities/ITI/	Water conservation	Construction Repair Maintenance	Construction of rainwater harvesting and storage facilities
Government educational institutions (PU colleges/Universities/ITI/ hostels)	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Government educational institutions (PU colleges/Uni- versities/ITI/ hostels)	Enabling urban agriculture for subsistence	Planting Maintenance	Individual and community farming, creating kitchen gardens with medicinal plants and greens to supplement nutrition
Government housing projects (JNNUM/ AMRUT, Aashraya, employee housing etc)	Water conservation	Construction Repair Maintenance	Construction of rainwater harvesting and storage facilities
Government housing projects (JNNUM/ AMRUT, Aashraya, employee housing etc)	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro-climate, residents well- being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees

Space	Purpose	Actions	Description
Government housing projects (JNNUM/ AMRUT, Aashraya, employee housing etc)	Enabling urban agriculture for subsistence	Planting Maintenance	Individual and community farming, creating kitchen gardens with medicinal plants and greens to supplement nutrition
Other government facilities	Water conservation	Construction Repair	Construction of rainwater harvesting and storage facilities
		Maintenance	
Other government facilities	Enhancing urban greenery (reducing air and water pollution, maintaining urban micro- climate, residents well-being, supporting biodiversity)	Planting Maintenance Removal	Planting appropriate vegetation, including ecologically suitable local species of trees where relevant, maintenance, for example loping and removal of dead trees
Others	Vermi- composting	Construction Repair	Urban organic waste from markets for creating vermicompost that can be sold via nurseries.
		Maintenance	Construction, maintenance and repair of facilities
Other government facilities	Enabling urban agriculture for subsistence	Planting Maintenance	Edible wild plant nurseries, coop nurseries for native fruiting species

Environmental monitoring and evaluation at ward level:

- 1. These are positions that can be for continuous months not exceeding 150 days in a year, and with a different set of people hired each year.
- 2. The employment can be in certain months of the year (for example, post monsoon as one stretch)
- 3. This will require easy to use equipment for data collection and programs for data entry
- 4. The position is to provide both employment and experience for unemployed who hold a graduate or post-graduate degree (BA, BSc, BBA, BCA, MA, MSc, MBA, BCA and so on)
- 5. The jobs in this will not be to meet shortfall in already existing government positions but are in addition to these
- 6. The information from these monitoring and data collection could feed into prioritising the kind of works that need to be done (table above)

Type of work and kind of space	Purpose	Actions	Description
Land use mapping of all common and public lands in the ward (lakes, wooded groves, tanks, ponds, water channels, rivers, school and so on)	Protection of common/ public land	Data collection Monitoring	Regular survey of all common and public lands Tracing boundaries using GPS points and marking land use features (for example lake inlets and outlets)
Mapping of stormwater drains	Water conservation	Collecting data Monitoring	Mapping all the stormwater drains using GPS and ensuring that they are maintained and not encroached upon.
Tree census of all trees in the ward (including trees on private property)	Biodiversity mapping for protection of greenery	Collecting data Monitoring	Collecting details of each trees in ward: GPS location, species, height, DBH
Water quality monitoring	Protection of water bodies	Collecting data Monitoring	Collecting water samples from lakes, river, ponds, tanks, wells
Climate monitoring: Heat islands and air pollution sensors	Climate change	Collecting data Monitoring	Collecting information on temperature and air pollution to monitor status of environment

Type of work and kind of space	Purpose	Actions	Description
Mapping waste dumps and stagnant water pools	Protecting against spread of urban disease	Data collection Monitoring	Collecting information on waste sites and water pools to ensure that they are addressed to control disease
Social interviews with local residents and users of commons/ public lands	Information to understand continued and changed use environmental resources	Data collection Monitoring	Interviews with those who use commons and public lands for livelihood and subsistence use. To monitor changes to use and understand causes. To provide information that can be used at time of rejuvenation works, for example, that of lakes to ensure all views and uses are included
Data entry	Knowledge centre		Updating data collected in ward from surveys and mapping

Annexure - C : Calculation of the Programme Budget

Scheme 1: Household

	Millions
Population (2018)	1354
Urban (35% of total)	474
Small town (50% of urban)	237
Households (avg size = 4)	59.2

	Category 1	Category 2	Total
Workers (millions)	30	3	33
Wage per day	500	500	-
Number of days per year	100	150	-
Annual wage	50,000	75,000	-
Wage bill (millions)	1480938	222141	1703078
Total bill (millions) (labor:non-labour 60:40)	-	-	2838463
Total bill in lakh crores	-	-	2.84
% GDP	-	-	1.7

Scheme 2: Individual

	Millions
Working age population (2018)	900
Small town working age pop (14%)	126
Labour force (LFPR 75%)	94.5

	Category 1	Category 2	Total
Workers (millions)	47	5	52
Wage per day	500	500	-
Number of days per year	100	150	-
Annual wage	50,000	75,000	-
Wage bill (millions)	2362500	354375	2716875
Total bill (millions) (labor:non-labour 60:40)	-	-	4528125
Total bill in lakh crores	-	-	4.53
% GDP	-	-	2.7

Sources and Notes: Population figures are taken from World Population Prospects 2017, UN DESA (https://www.un.org/development/desa/publications/world-population-prospects-the-2017-revision.html). Category 1 worker pool is assumed to be the bottom half of the labourforce based on income data obtained from Consumer Pyramids Survey (CMIE). Category 2 worker pool is obtained by multiplying the share of higher educated in the urban labourforce (25%) with the rate of open unemployment among the higher educated (20%). See Section 3.2 for explanation.

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