Urbanisation of Rural Areas PURA Scheme as the Game Changer

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For far too long, the subject of urban and rural development has been dealt with as autonomous activities by the policy makers, the academia and the civil society. This is reflected not only in the designs of the schemes and programmes but also in the standards followed, implementation methodology and the expected outcomes. In the end, those living in the rural areas feel dissatisfied with the quality of life. This is also true for the development of infrastructure. Large sums of money are being spent on the infrastructure of rural areas. However, several constraints are responsible for the impact not being so visible and for lower levels of citizen satisfaction:

- The delivery of different schemes is not simultaneous and the impact of one is often lost by the time the next infrastructure asset is created. For instance, a rural road may reach a village in the year 2008, electricity in 2010 and telecom in 2012. By the time telecom services are rolled out, the road is already in a state of disrepair.

- Whereas huge sums are earmarked for capital expenditure (capex) and creation of new infrastructure assets, very little resource is deployed for maintenance. This is also on account of the classic division between 'plan expenditure' and 'non-plan expenditure'. As non-plan expenditure is met from the state budgets, there is very little money available for maintenance of infrastructure assets.

- Each of the schemes operates autonomously and there is little synergy in the implementation. This results in sub-optimal use of resources.

- The standards set for infrastructure services delivery are far below those set for the urban population.

Poor infrastructure dampens economic potential of rural areas and results in acceleration of the migration to urban areas. This, in turn, puts pressure on urban infrastructure, and mushrooming slums in all large cities are a testimony to this fact. Inadequate economic opportunities in the rural areas also perpetuate dependence on agriculture for livelihood and make the task of poverty reduction much more difficult. The Pradhan Mantri Sadak Yojna (PMGSY), one of the best-run rural development programmes, has radically unlocked economic values in the rural areas. Although no study has established any correlation between rural roads and rural economic growth, some figures do indicate that the impact may be quite significant. According to an IIFL survey, agriculture exports from India have become more competitive, resulting in 20.2% CAGR in agriculture exports during FY04-08, compared with 11.5% annual growth in the previous decade. Much of this change in the fortunes of the rural India could be attributed to the strategy of inclusive growth followed by the Government and the contribution of the PMGSY.

It is therefore important to see how the scheme for Provision of Urban Amenities in Rural Areas (PURA) could actually act as the catalyst not only for convergence between different infrastructure development schemes in the rural areas but to emerge as a new model for the management of urbanisation of the rural areas. The recently approved PURA scheme for running of a few pilots is likely to bring about a major change in the manner in which rural development is treated by the stakeholders. For the first time, a uniquely designed public-private partnership (PPP) model is being tested for creation and maintenance of rural infrastructure assets with pre-determined service delivery standards almost akin to urban standards. While most of the capital expenditure requirements would be met from the existing Government of India schemes with the service charges determined by the Government, the construction and maintenance of assets and service delivery, for a pre-determined period, would be by the private partner on commercial considerations. To attract the private sector, the scheme is designed to be 'project based' with well-defined risks, measures for risk mitigation fully explained and allocation of risk between the sponsoring authority (Panchayat), Government of India/State Government and the private developer clearly spelt out.

Background

The idea that the rural areas must be provided urban amenities was first mooted by the then President of India, Dr. A. P. J. Abdul Kalam, during his address to the Nation on the eve of Republic Day 2003. To understand clearly his vision, one must read the extracts from the speech:

Knowledge Powered PURA

"More than two thirds of our billion population live in the rural parts of India. The vision of transformation to a 'developed' India can only be realised if we launch a mega mission for empowering the rural people. My visits to the rural parts of India have confirmed that the problem of rural India depends on the extent of connectivity available there. The connectivity that I refer to would include four components. Physical connectivity by providing roads in rural areas, electronic connectivity by providing reliable communication network and knowledge connectivity by establishing more professional institutions and vocational training centres. Schools with best infrastructure and teachers who love teaching, primary health centres, silos for storage of products and markets for promoting cottage industries and business, employment opportunities for artisans are some of the elements of PURA. All this connectivity needs to be done in an integrated way so that economic connectivity will emerge leading to self-actuating people and economy. Such a model of establishing a circular connectivity among the rural village complexes will accelerate rural development process by empowerment. I am sure that removal of poverty will call for Providing Urban amenities in Rural Areas (PURA). The model envisaged is a habitat design that would improve the quality of life in rural places and make special suggestions to remove urban congestion also. Instead of village population coming to urban area, the reverse phenomenon has to take place. The PURA has to be a business proposition economically viable and managed by entrepreneurs and local people and small-scale industrialists, as it involves education, health, power generation, transport and management. Government's support should be in the form of empowering such management agencies, providing initial economic support and finding the right type of management structure and leaders to manage and maintain."

The Government responded positively and the then Prime Minister of India announced the PURA scheme on Independence Day in 2003.

In the first phase, the Ministry of Rural Development implemented seven pilot projects from 2004-05 to 2006-07 with a total outlay of Rs. 30 crores in the State of Assam (Gohpur), Andhra Pradesh (Rayadurg), Bihar (Motipur), Maharashtra (Basmath), Rajasthan (Shahpura), Orissa (Kujanga) and Uttar Pradesh (Bharthana). The pilots did not succeed as PURA became another rural development scheme and provided some additional funds over and above the funds available under the ongoing schemes. There was no impact of the scheme, and in most cases, the projects sanctioned under pilots did not create any meaningful infrastructure assets or economic activity as was envisaged. Based on the experience of the pilot projects and feedback from various stakeholders including the participating state governments, it was decided that the PURA scheme should be completely revamped and made more meaningful. The recently approved scheme for running a few pilots with a total plan outlay of Rs. 248 crores for the remaining period of the XI Plan is an attempt to creatively redesign the scheme to provide a different framework for the implementation of rural infrastructure development schemes and inject private sector efficiencies in the management of assets and delivery of services.

Objective

For the programme to be successfully implemented it is critical that the objective should not be multiple and should be simple to comprehend and measure. Therefore, for the revamped PURA, true to its nomenclature, provision of urban amenities in rural areas should be the primary objective and the programme has been designed to achieve this objective. However, sub-objectives include reduction in the pace of migration from rural to urban areas and creation of in situ livelihood opportunities.

The definition of provision of urban amenities has been refined. The following would constitute PURA: notified listing of urban amenities that are essential for fulfilment of PURA. These are drinking water supply and sewerage, drainage, solid waste management, skill development and development of an economic activity. In addition, electricity distribution, telecom services, street lighting through non-conventional energy sources, etc., could also be provided. The latter is only an illustrative list, which can be modified. In addition, it is expected that the private partner would also undertake some add-on commercial activities that not only create revenue streams for him but also add to the economic infrastructure of the identified villages. However, it is imperative that the list is firmed up and frozen, and once the mandatory and the optional activities are bundled in a project, all of the identified activities become mandatory and part of the project deliverables. This would be necessary for ring fencing the project. No private developer would venture to invest in a project unless all the risks are identified and mitigated to the extent possible and properly allocated. Similarly, Government also would not be able to commit resources without mitigating the risk of the uncertainty of deliverables.

Therefore, for the success of PURA project, the infrastructure provisioning can be understood through the following table:

Table I
PURA Project

Type of Infrastructure	Funding	Implementing Agency
Core Facilities (road to the village, electricity to the village, bulk water supply, etc.)	GoI/State Government	GoI/State Government or their agencies
Urban Amenities		
A. MoRD Schemes (drinking water supply and sewerage, drainage, solid waste management, skill development and development of economic activity)	RD schemes/Private Developer	Private Developer BOT model
B. Schemes of other Ministries (telecom, street lighting, electricity, etc., outside of MoRD ambit)	Schemes of other ministries/Private Developer	Private Developer BOT model
Add-on Facilities (marketing centre, industrial estate for village industries, technical/vocational training institutions, etc.)	Private Developer/ Panchayat	Private Developer

The mode of delivery is PPP, and the relationship between the public sector entity and the private sector partner would primarily be through a concession agreement. Each PURA project would have to be within a single legal jurisdiction of a local government. Project spilling over too many jurisdictions would create legal risks unacceptable to the private party. Therefore, the PURA project should be within the jurisdiction of a Panchayat, with the HQ as the growth centre and the constituent 'Grams' as nodes. Initially, the larger Panchayats could individually provide critical mass to make the project viable. Alternatively, a cluster of Panchayats could form PURA cluster with Panchayat sub-projects as its part, in order to obtain the critical mass required for interesting responsible organisations as private developers.

Business Model

As the returns on investment will be based on a thin revenue base, most of the capex will have to come from Government schemes. Practically it is difficult to manage effective coordination in the delivery of schemes that are administered by different ministries and departments. The mandatory activities would be from within the Ministry of Rural Development schemes. Secondly, only community development schemes would ordinarily be included, as individual beneficiary schemes have a different level of political sensitivity and private developer would find it difficult to manage these. Thirdly, an omnibus provision would be made in all schemes and programmes included to allow the execution to be done through the private developer in place of Panchayats or government departments, as their agent. Fourthly, the PURA project ought to include at least one scheme of other ministries that are available 'on tap', as some areas of critical infrastructure necessary for the project are not within the purview of MoRD.

The difference in the private sector involvement in PURA project would be that the developer would not be treated as a contractor for the Panchayat or the department but as a concessionaire for the Panchayat who implements these schemes as its agent. The implementation will be done within the guidelines for each of the identified schemes/ programmes. However, it is possible that the essential infrastructure may not be fully funded by Government schemes and the developer is required to invest some capex on his own.

Lastly, it is necessary that a few 'commercially viable' and 'people centric' projects be developed, preferably in partnership with the PRIs. These would typically not be funded from the Government schemes but through private investment and run on commercial considerations. Such projects could include:

- Village tourism projects - that provide direct employment to locals and opportunities for income to local artisans, performing arts, etc

- Setting up good skill development institution - this would link up with the economic activity initiated in the project

- Integrated rural business centres - that will help the local economy to upgrade to commercial scale

- Health care facilities - that will make available quality care for the villages in the project area

A necessary ingredient for all these projects is the availability of land. The land could be made available by the PRI in return for a percentage of revenue share in the commercially viable projects. The profit that the private partner makes in such sub-projects could partly cross-subsidise to pay for 'urban amenities' infrastructure services that may not have commercial viability at this stage. On the other hand, revenues generated for the Panchayats could be the income of the Panchayats. Alternately, the developer may acquire land on his own and run these activities for earning revenues.

The 'returns' for the developer will also be from the revenues that can be generated within the overall framework of the rural economy. For example, sewerage outfall can be captured, in addition to agriculture waste, in a large bio-gas digester and the gas so generated can in turn generate grid-enabled electricity which can be sold to the grid to generate revenue. Maintenance of the infrastructure assets and provision of services can be part funded through such revenues. Other similar innovative revenue streams can be identified from the list of the add-ons.

The viability gap that may still exist will be met from the PURA scheme under which up to 35% of the project cost can be given as a grant to the project. As the concept is very new for rural infrastructure development and it may be difficult for the private sector to identify all the risk for pricing, for the pilots the grant would be fixed based on the appraisal of the DPR (detailed project report) and approved by an inter-ministerial committee. However, once the pilots are over, it is expected that the bidding parameter will be the lowest grant sought and the fund outgo from the Government would be subject to market efficiency test.

Project cost for the purpose of grant shall constitute Capex+Opex of Essential+Add-on infrastructure. To ensure delivery of all elements of the project, add-ons submitted as part of the DPR shall become 'essential' for the purpose of performance guarantee.

Indicative PURA Project

Based on the above premise a costing exercise was undertaken for providing urban amenities - including 'Urban Amenities' and 'Add-on' infrastructure for a rural area covering 30, 000-40,000 people in one or more adjacent PRIs in an area of about 20-25 sq km (where the population resides). In addition to the above, the cost of a lead economic activity and skill development programme was also included based on available benchmarks of spending.

The following key assumptions were made for the purpose of estimating the overall costs of the project and sources of funds:

1. Existing schemes within the purview of the Ministry of Rural Development would be channelled to the PURA project as per the existing norms.

2. Additional funds over and above the norms would be provided through the PURA scheme.

3. In specific cases such as telecom, village lighting and electricity, schemes exist of other ministries, viz. the common service centre (CSC) scheme of Department of Information Technology and schemes of the Ministry of Non-conventional Energy Sources. These schemes would be available for pilot projects.

4. The operating expenses for maintenance of these facilities and Capex shortfall would be covered through a one-time capital grant as viability gap funding from PURA scheme. These facilities constitute public infrastructure being implemented through a PPP framework and as such the project would be eligible for such funding. The funds would be invested in risk-free government bonds and such similar-rated instruments

for which a return of 12% has been assumed.

5. The skill development activity is a one-time effort of coverage and hence being treated as a capital expenditure for the purposes of this project.

6. The costs of an independent engineer who would monitor and certify satisfactory delivery of these services for the purpose of performance guarantee would also be factored in, so that the private developer has a sound reference point for approval of payments by the PRI(s).

7. Add-on projects that are people centric in nature, such as village tourism, a school and an integrated hub, have been costed. It is assumed that the 25% share of profit accruing will be used by the PRIs to pay for the above-mentioned services.

Based on the above a typical PURA project would look (Figure 1).

It would be noted from the above table that an overall project cost of about Rs 100 crores would cover 7 'urban' amenities, a skill development activity covering one person from each household and support for a lead economic activity, making it a total of nine activities. In addition, three add-on activities which are people centric and are expected to create in situ livelihood for local people would also be covered. This would result in attaining, to a large extent, the goal of inclusive growth.

Total funding of about Rs. 18 crores would be from MoRD schemes (18%) and Rs. 1.9 crores (2%) from schemes of other ministries. About Rs. 49 crores, which is 49% of the project cost, would be mobilised as private sector investments in add-on projects and for Capex shortfall for infrastructure assets and to create the framework of PPP. The viability grant would be Rs. 31 crores, which is 31% of the total project cost.

Thus, at a cost of about Rs. 23,964 (this does not include 1% management fee) per capita, it would be possible to ensure robust provision of eight infrastructure amenities over a 10-year concession period, support employability for each BPL household and assist commercial scaling up of a lead economic activity. If the same amenities were to be provided through public sector delivery mode, the cost of delivery would be the same. Whereas in the PPP mode we have assumed management cost to be 1% of the capex, our understanding is that the management cost in public sector would be considerably higher, if fully costed.

However, given differences between rural locations in terms of topography, population distributions, the state of economic development and the development of PRIs, actual costs for such an exercise will require detailed study of the selected project area. While for the purpose of costing this project, no user fees have been assumed, it is desirable that some fees, to the extent that it can be reasonably borne by the beneficiaries, be charged and the services not be entirely free.

Figure 1. Summary of block costs for typical amenities proposed for PURA project

SCENARIO-2 PROJECT for 10 Years : SUMMARY OF BLOCK COSTS FOR TYPICAL AMENITIES PROPOSED FOR PURA PROJECT

Figures in Rupees Million					**Sources of Funding**						
A	**Urban Amenities**	**Target**	**Size**	**Unit**	**Capex**	**Opex p.a.**	**RD**	**Other**	**PURA**	**Private**	**Name of Scheme**
I	**MoRD Schemes**										
	1 Water and Sewerage	100 lpd	2.5	mlpd	71.45	–	5.72	80%		14.29	Swajaldhara Scheme
	2 Road (Village)		16.75	km	23.45		2.35			23.45	
	3 Drainage		16.75	km	13.07					13.07	
	4 Solid Waste Mgt		5	pits	1.87		0.48	80%		0.37	
	5 Skill Development		5000	persons	75.00			100%			Special SGSY
	6 Lead Economic Activity		1000	persons	50.00			100%			Special SGSY
	Sub total				**234.84**		**8.54**				
II	**Non MoRD schemes**										
	7 Village Street Lighting		840	lights	16.38		0.82		8.19	8.19	MNES
	8 Telecom		5	kiosks	0.38				0.38		DIT, CSC Scheme
	9 Electricity		1	MW	80.00				10.00	70.00	MNES
	Sub total				**96.76**		**0.82**				
B	**ADD ON PROJECTS (Revenue Earning People Centric Projects)**				**12% Return on investment (ROI)expected**						
					25% Deficit % on ROI expected						
	10 Village linked Tourism				100.00		3.00			100.00	
	11 Integrated Rural Hub for Agri-busines				100.00		3.00			100.00	
	12 CFCfor local industries				160.00		4.80			160.00	
	Sub total				**360.00**		**10.80**				
C	**Independent Engineer to be appointed for PRI Support**						6.00				
D	**Return to Developer**										
	i Management fee (% of Capex on Projects sub-total E Below)			1%			6.92				
	ii ROI for Category A Infrastructure Total figure in Rs. mn)		129.37	12%			15.52				
	(Includes project listed against Categegory A- nos. 1,2,3,4, 7 and 9)										
E	**Sub-total of Projects**				**691.59**		**48.60**				
	Viability Gap Funding			9%			311.90	–	312		PURA
	(This figure is the NPV of the Annual Operating Expenses/Deficit on Returns over a 20 year period. This amount has been discounted at the rate % shown above)										
G	**Total Project Costs (E + F) Capex + VGF**				**1003.49**		**184**	**19**	**312**	**489**	
					100%		18%	2%	31%	49%	
% Viability Gap Funding / Project Costs					31%						

Note :

1 Drains will be cleaned by sanitation staff
2 Telecom, Electricity will be covered by user fees
3 Composting pits will be self-sustaining at local community level
4 PMGSY roads to be maintained by state government
5 Skill Development treated as one time Capex to create one job per household and not ongoing activity

Per Capita Spending for Core And Vital Amenities	25,740
Per Capita Spending for Add on Projects	14,400
Total Per Capita Spending on Capex	40,140

The third category of projects constituting 'add-on activity' would primarily be self-sustaining in nature and would include people-centric activities, as seen from the illustrative list given above. Funding support would not be required from MoRD. It is conceivable that these projects could be developed as a partnership between the PRI and the private developer. The PRI could contribute land towards these projects in return for a share of equity or profit from the project. Surpluses thus generated will go back to the PRI to support development and operations of rural infrastructure. It is conceivable that a shelf of such people-centric projects would result in considerable independent revenue sources for the PRI even while promoting local development.

As the model is complex, has not been tried anywhere in the rural areas in any of the developing countries before, it requires willingness and active participation of the Panchayats and familiarity with the local conditions is a pre-requisite for success, for the pilots the selection of the PURA cluster would be left to the technically qualified private sector partners.

Process

It is expected that about six to eight pilots would be possible within the plan allocation for the scheme in the XI Plan. For the pilots, Expression of Interest would be called for from infrastructure development companies who have also played a developmental role in mainstreaming PPPs. The selection of the partners would therefore be based only on technical qualification. The selected partners would also be given the flexibility of selecting the Panchayat/cluster of Panchayats in which PURA will be implemented. Care would be taken to ensure that the selected PURA Panchayats are dispersed geographically around the country to be representative in nature. Ideally, each party should be permitted a maximum of three PURA projects. Similarly, not more than two PURA projects should be approved for any State. The technically qualified private partners would prepare DPRs for the identified PURA clusters and submit to the Department of Rural Development. The PURA grant to the project would be approved based on the appraisal of the DPRs. However, the PURA cluster project cost would not exceed Rs. 125 crores and the grant to the project would be up to 35% of the project cost. The grant will be released in four instalments, assuming that the concession will be for 10 years and the construction phase will be 2 years.

Based on the experience of the pilots, the scheme would be fine-tuned and implementation scaled up with necessary modifications. If the PURA pilots succeed, there would be a paradigm shift in the manner in which rural infrastructure is developed and maintained. It would also redefine the quality of services delivered in the rural areas.

Author's Profile

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