

**Paper Submitted for**

**Conference of the Regulating for Decent Work Network**

International Labour Organisation  
Geneva, Switzerland  
July 8-10, 2009

---

---

**Title of the Paper**

**Techniques in Innovative Policy  
Making – Examples from India**

---

---

**Submitted by**

**Srikanth Goparaju**  
Associate Professor  
Alliance Business School, Bangalore  
srikant.goparaju@alliancebschool.ac.in

**Samik Shome**  
Assistant Professor  
Alliance Business School, Bangalore  
samik.shome@alliancebschool.ac.in

***Address for Communication:***

***Alliance Business School***  
*No. 2 & 3, 2nd Cross, 36th Main, Dollars Scheme,  
BTM 1<sup>st</sup> Stage, Bangalore – 560068, Karnataka, India.*  
*Office: +91-080-30938144; +91-080-30938173; Fax: +91-080-27841608.*

# Techniques in Innovative Policy Making – Examples from India

*Srikanth Goparaju\* and Samik Shome\*\**

**Keywords: Migration, Child Labour, Poverty, Innovative Decision Models, NREGA**

## **Abstract**

*ILO's core programme is directed towards solving the most significant social and economic ills in the world. Most States are working on its full implementation, while some other States, in addition, have made considerable progress in non-core programmes as well. However, there exists a long and difficult journey ahead. This is because the nature of social ills such as child labour, unemployment, and accelerating pace of rural-urban migration is complex and enormous. This paper introduces an innovative regulatory approach that addresses the complexity and scale of such problems. An analytical and decision-making model is presented. This model prescribes reflecting on two or more problems simultaneously. Such an approach is expected to create a fresh opportunity for policy makers in solving problem scenarios, bringing their vantage point to bear on pressing social matters.*

*The model presented in this paper is applied to analyze a recent legislation of the Indian Government known as NREGA or National Rural Employment Guarantee Act, 2005. NREGA is an Act that provides 100 days of unskilled work as a right for rural citizens. It represents a novel approach to policy-making and demonstrates the positive role governments can play in labour markets. The design, implementation, and promising initial results clearly challenge existing wisdom on how to make effective policy decisions. The framework presented in the paper best explains various facets of this remarkable policy. Pioneering future applications to other social and economic challenges are suggested. Also, implications for research and policy are provided.*

---

\* Associate Professor, Alliance Business School, Bangalore. Email: srikanth.goparaju@alliancebschool.ac.in

\*\* Assistant Professor, Alliance Business School, Bangalore. Email: samik.shome@alliancebschool.ac.in

## 1. Introduction

Decision-making processes have been well studied in the fields of management and social sciences. Decision-making simply involves making choices that attempt to address problems. Simon (1994) and subsequent scholars have further developed the science of decision-making as it normally occurs in organizational, social, and public policy contexts<sup>1</sup>.

A special form of decision-making called 'strategic decision-making' involves finding ways and means of reaching the goals of the organization and responding to the environment. Given the inherent nature of problems addressed, strategy-making is more complex and involves higher analytical and reasoning skills.

Innovative strategy-making involves the use of novel and creative methods to address organizational challenges. Such models have recently become well known as the complexity and nature of change experienced by organizations has accelerated.

There exist parallels in how innovative strategy-making, and business and public policy-making processes occur. In the sphere of public policy, often scientific advisors provide valuable recommendations that help the representatives of the people make or amend laws (George, 1972). Also, this process is well illustrated through the experience of Simon who in 1974 chaired the Committee of National Academy of Sciences to find answers to questions required by the policy makers (Simon, 1974). These problems relate to the technical feasibility of controlling automobile emissions, and the impact on health due to auto pollution.

Given this background, two innovative decision-making models that have become well known globally are reviewed in Section 2. Next, a general model for innovative decision-making is presented in Section 3. Section 4 gives an idea how the model can be applied to an innovative Government policy in India called NREGA. Further, a detailed analysis of NREGA is provided in Section 5. Such detailed country analysis has been encouraged by scholars of RDW at ILO (Lee et. al., 2008). Section 6 presents the scope

---

<sup>1</sup> For more details, please see Allison and Zelikow (1999), Cohen et.al. (1972), George (1972), Janis (1982), March and Simon (1958), and Mintzberg et.al. (1976).

for future applications of the model. Implications of the model for policy-making and research are represented in Section 7, followed by certain concluding comments in Section 8.

## **2. Innovative Decision-making Models – A Brief Review**

In this section, recent and most advanced thinking in the area of innovative decision-making is reviewed. Innovative decision-making models are well suited to address those problems that are enduring and wherein the simple models have not been satisfactory.

A review of the highly developed thinking in the area of organizational change indicates that there are two techniques for problem solving that are potentially relevant to the subject discussed in the paper.

(a) Porras (1987) has suggested ‘Stream Analysis’ as a method of creative problem solving in organizations. Here, the problems are categorized graphically into four streams – organizing arrangements, physical setting, technology, and social factors. These problems are then analyzed by a team and the core problems are identified. This graphical approach helps organizations focus their efforts on core issues. These models have been further developed by consulting and software firms<sup>2</sup>.

(b) ‘Learning Organizations<sup>3</sup>’ (Senge, 2006) also suggests the importance of studying cyclical feedback loops that operate at various level of policy-making. ‘Systems thinking’ is a discipline that draws attention to the fact that decisions have consequences and these consequences feedback to influence other decisions. Understanding the generative archetypes and addressing systemic causes helps an organization achieve real solutions to problems.

The two models reviewed above provide not only a new conceptual approach to decision-making (above and beyond the rational model of decision-making or

---

<sup>2</sup> [http://changeanalytix.com/software\\_streamanalysis.asp](http://changeanalytix.com/software_streamanalysis.asp)

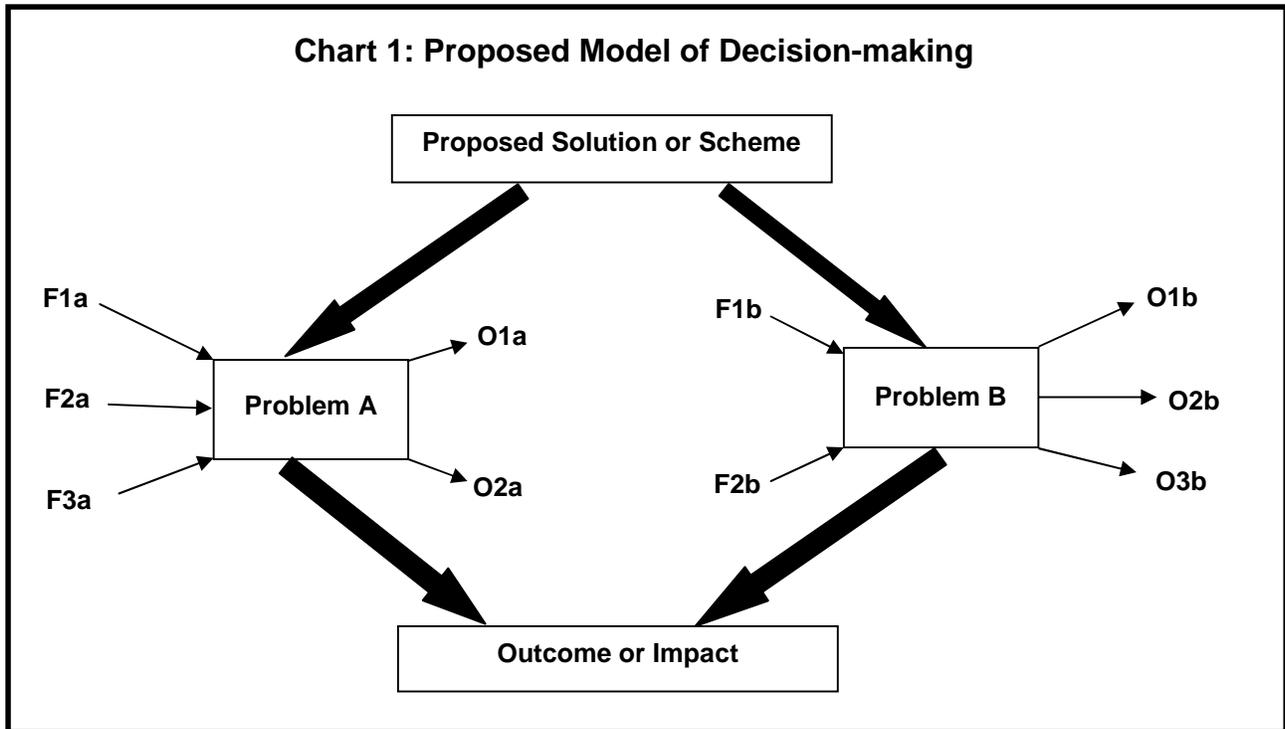
<sup>3</sup> Learning Organizations are ‘organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together’ (Senge, 2006: pp.1).

management science) but also are prescriptive in nature in that they provide a guide to action. These models have been applied to a wide variety of organizational problems and are beginning to be applied to the public policy sphere. The model presented in this paper also falls in the same category of new conceptual and prescriptive efforts to take decision-making and policy-making to the next level.

### **3. Proposed Model – General Presentation**

A general model of problem-solving is presented below (Chart 1) that builds on the rational model of decision-making (management science at the organizational level). For the sake of simplicity, two problems have been considered – Problem A and Problem B. The two problems are individually analyzed. This yields the antecedent factors. These factors are identified for each problem i.e. F1, F2, F3 etc. The subsequent outcomes are also identified i.e. O1, O2, O3 etc. The factors and outcomes are appropriately connected with the relevant problems i.e. F1a and O1a for problem A and so on. Generally, States pass legislation aimed at addressing each problem separately with varying results. However, this proposed model prescribes tackling of the two problems simultaneously.

In order to solve the problems, each problem is analyzed separately. The positive and negative characteristics of the problem are identified. Now the proposed solutions are taken up in such a way that the positive characteristics of one problem balance themselves off against the negative characteristic of another. The same approach can be extended to three problems – Problem A, Problem B, and Problem C. The analytical steps remain the same. However, now characteristics of each problem are pitted against each other. A creative scheme or solution then needs to be identified that balances off the characteristics of one problem against another.



### 3.1. Preconditions for the Model to Function Effectively

In order for the model to work well various preconditions have to be met. These are discussed below:

#### a. Having substantial information about the nature of problems

It is important to analyze the problems individually. This information will help in identifying the historical pattern of success in solving it; generating information related to the causal factors; and also, in reviewing available information on the consequences. This first step can then be used to clarify the nature of the problems. This stage is similar to the 'problem identification' stage commonly known to decision science scholars.

#### b. Having clarity on the relative positive and negative characteristics of each problem

First, information on antecedent and consequent factors for each of the problems needs to be collected. The most important components of these characteristics are then identified and listed. The possible interaction and implications of one problem with another are then reviewed carefully. This can be called as the 'multiple problem analysis' stage.

### **c. The dynamics of solution-problem situation interaction**

Based on the earlier analysis, various creative alternatives are considered. The alternative schemes and their interaction with the problem and the factors associated with the problem are considered. The dynamics of this interaction is studied carefully. The scheme objectives must be such that the positive characteristics of one problem balance themselves off against the negative characteristics of another. This stage could be referred to as 'solution formulation' stage.

### **d. The modalities and consequences of implemented solutions**

Once the solutions are implemented, new processes are initiated. These implementation processes can take a phased approach or they can occur more rapidly. How exactly these implementation steps are carried out and how they interact with various characteristics are studied further. This stage may be called 'implementation planning' stage.

In order for the model to work well, each of the earlier stages must function smoothly. It is assumed, therefore, that substantial information exists on the problems, there is clarity on various characteristics of the problems, and the dynamics of solution-problem interactions can be studied easily, and also, the modalities and consequences of implementation are known and available. Real world policy-making is expected to be much more complicated and uncertain. Given this difference, various limitations of the model can be identified. These are discussed in the next section.

## **3.2. Limitations of the Model**

The model ignores bounded rationality (Simon, 1972), intuition, and other political, situational, psychological, and social factors that may influence decision-making and policy-making processes. The influence of these factors is a topic that deserves a separate treatment. In many ways, the model is an extension of the rational model of decision-making. However, in the model there is a role for intuitive processes in finding creative solutions that bridge problems.

### **3.3. Similarities and Differences with Other General Models**

The basic thinking underlying the model was probably known even to the primitive man. The simple idiom 'kill two birds with one stone' possibly captures the approach taken here. However, clearly, the model represents a further advancement of new thinking on decision-making approaches. This approach can be applied to a vast array of issues and in tackling not just one or two but several problems.

The underlying thinking is also reflected in the approach of early organizational thinkers. Organization and decision scientists have dwelled on the problem of integration. The purpose of having a 'vertical hierarchy' in an organization is to facilitate decision-making so that the operative staff can better co-ordinate toward organizational goals (Simon, 1994). The very idea of setting up cross-functional teams and to utilize diverse groups within companies is to bring ideas from various areas together toward a better overall solution. For example, in India a group of nine ministries was brought together under the National Authority for the Elimination of Child Labour to mitigate child labour (Naidu and Ramaiah, 2006: pp. 203). Organizational scholars have often pointed out the need to find 'integrated solutions' when two different departments within a company come together to find a common solution (Senge, 2006: pp.344). General systems theorists also argue that the various parts within a system are interrelated. Solutions to problems must be formulated in such a way that the external forces and factors at play must be taken into account.

The model presented in the paper does not contradict the above prescriptions. Rather, the model is applicable to situations even where the problems are not necessarily related to each other. Possibly, it is the interaction of the solution (proposed scheme) with the characteristics of the problems that elucidates the dynamics of how the model works.

The general model differs from the more advanced methods discussed in the literature review such as Learning Organizations or Stream Analysis. There could be elements of these advanced methods that may partially explain the nature of socio-economic problems and describe the dynamics of their influence on society. However, the framework described in the paper (i.e. the general model presented above) best explicates the complexity of the social and economic issues and paves the way for an

innovative approach in solving them. It is argued that the framework presented in the paper be considered as a separate general model of innovative decision-making. In the next section, a specific analysis of these issues through the application of the proposed framework to the Indian context is provided.

#### **4. Application of the Model in the Indian Context – An Example**

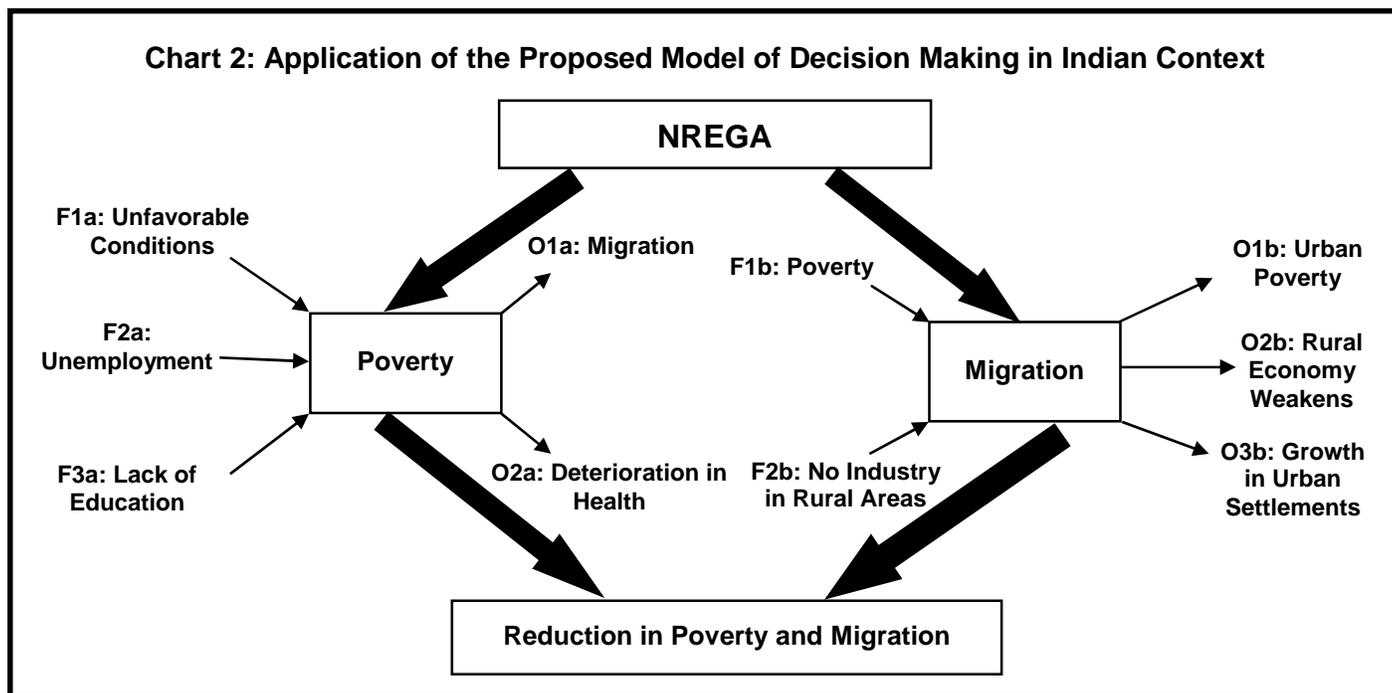
The application of the model is illustrated by reviewing an innovative scheme in the context of India. NREGA or National Rural Employment Guarantee Act, 2005 was a creative programme implemented by the Indian Government. For the sake of illustration, two problems are considered i.e., rural poverty and migration (Chart 2). Unemployment is considered as an underlying factor for the two problems. The antecedents to poverty are many but some are presented here, among others. There are certain districts in India where conditions are not favourable for agriculture and poverty has been endemic in these areas (F1a). Chronic unemployment has been a cause of deep poverty as the poor do not have any income (F2a). Similarly, it is generally believed that lack of education contributes to poverty (F3a).

The consequences of poverty are also many, however, a few major consequences are listed here. Poverty is responsible for migration to cities (O1a) and in the progressive deterioration in the health of the poor further contributing to their poor conditions (O2a). There could be other factors that are antecedent or consequent to poverty such as child labour. This issue will be taken up in later sections.

A second problem is considered next. This is the problem of rural-urban migration that is high on the agenda of policy makers and urban planners. Selected antecedents are described next. Migration to urban centers is caused by poverty (F1b). Lack of any investment in rural areas by the government, and other public or private sector companies has also been a cause for migration (F2b).

Rapid and uncontrolled migration to urban centers has led to the growth of urban settlements (O3b), the urbanization of poverty (O1b) (Harris and Todaro, 1970), and the consequent weakening of rural economy (O2b).

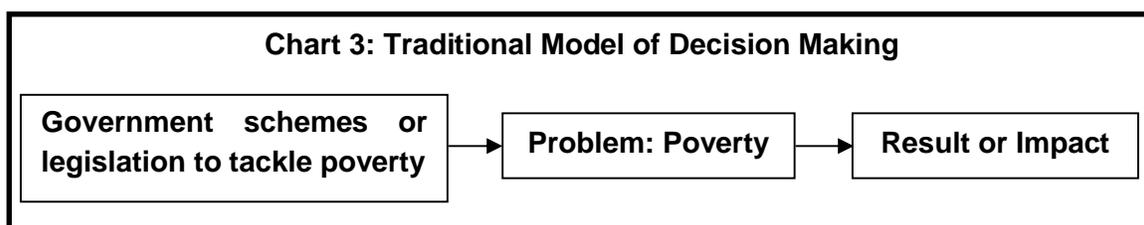
The solution – NREGA – through its design and implementation has jointly addressed O1a and O1b i.e. has led to mitigation in both rural poverty and rural-urban migration. By providing employment opportunities within the rural areas itself, several issues are simultaneously solved. Through employment, rural poverty is reduced, and this leads to a reduction in rural-urban migration which in turn curbs urbanization of poverty.



#### 4.1. NREGA vs. Traditional Solution

NREGA is an example of an innovative policy that has features similar to the policy-making model that has been outlined in the paper.

It differs from the traditional model of decision-making wherein a simplistic solution to the problem is attempted by enacting legislation (Chart 3). Such legislative measures have been taken up in the past but have failed. For example, the following is a conceptualization of the traditional approach to address social and economic ills.



In India, Government schemes and policies aimed at reducing poverty or alleviating poverty have had less than satisfactory results. Simplistic and populist measures ignore associated and consequent factor dynamics that diminish the overall effectiveness of such schemes. In other cases, international dimension of the problems must be factored in. For example, scholars have now begun to question the effectiveness of a simple ban on child labour initiated by ILO across countries (Bertola, 2009).

Employment schemes in India that are based on the traditional thinking described above have similar limitations. Such limitations were identified in a study carried out by the apex advisory council of the Indian Government. The National Advisory Council (NAC) to the United Progressive Alliance (UPA)<sup>4</sup> government had made an in-depth study of the job guarantee schemes which was launched by the erstwhile Governments. During the study, it was revealed that the policies launched by the previous Governments had serious inadequacies. The study recommended that these inadequacies should be corrected in future schemes. The credibility of earlier programmes was mostly undermined by over a dozen serious flaws in meeting their objectives. Some of the inadequacies at the rural level were: lack of awareness amongst local communities about existence of government programmes, dearth of community participation, lack of planning, creation of sub-standard quality of assets, false muster rolls, problems of payments, contract system, diversion of funds, weak monitoring and verification systems, absence of comprehensive data base, inadequate capacity of implementing agencies, multiple wage programmes running in parallel, and most importantly no public accountability (Report of Ministry of Rural Development, 2006) . The NAC was then entrusted with the project to transform rural lives in India through social intervention by initiating a new scheme called National Rural Employment Guarantee Scheme (NREGS). Some new features of NREGA include employment on demand, minimum wages, payment within 15 days, and worksite facilities, and some unemployment allowance for unmet demand of employment.

Therefore, NREGA can be considered as a different policy solution compared to simplistic schemes and programmes.

---

<sup>4</sup> United Progressive Alliance is an alliance of political parties that came to power in the Centre in 2004.

## 4.2. NREGA vs. Other Innovative Approaches

While traditional models have not been able to deliver promising solutions, there is a potential to apply innovative models to address socio-economic problems. For example, the ideas of Stream Analysis can be extended to labour reform issues (Porrás, 1987). Various problems that constitute the agenda for labour reforms can be categorized around four streams as suggested by the model. Failure to integrate widely dispersed skills and abilities into the productive economy could be an issue of 'organizing arrangements'. Difficult or harsh local conditions may be categorized as the 'physical setting'. The digital divide and inadequate technology transfer mechanisms can be categorized into 'technology issues'. And the lack of social mobility within and across societies can be regarded as 'social factors'. By categorizing a range of such labour problems, the common themes between the problems can be identified. From here, core issues can then be filtered and appropriate measures can be taken to solve them. However, such an application of the model to labour issues has not been popularized yet.

Similarly Learning Organizations thinking can be used to analyze labour issues. Learning organizations attempt to understand the archetypes that generate problematic issues. These issues and their consequent feedback loops are studied to find solutions. The desire to change the nature of work fundamentally and to ensure the success of initiative such as the UN Global Compact is some of the drivers for forming learning communities (UN Global Compact, 2008). The 'core agenda' of ILO is reflected in the UN Global Compact. However, such direct application of Learning Organizations to various socio-economic issues has been suggested but not been fully developed yet.

The key reason for the potential success of NREGA is best explained by the model presented in the paper. The balancing off of unemployment-poverty and poverty-migration-urban poverty linkages by providing employment in rural areas itself is a key feature of NREGA. This key feature is captured and explicated clearly by the model. Thus, NREGA has demonstrated promising results in addressing the two social ills: first, the skyrocketing unemployment crisis in rural areas that has caused distress rural-urban migration. Second, it has contributed to the village economy in a sustained manner. A detailed analysis of NREGA is now provided in the next section.

## 5. NREGA – A Detailed Analysis

NREGA or ‘National Rural Employment Guarantee Act (2005)’ was enacted on September 2005 in India. It was first brought into force with effect from February 2006 in 200 of the most backward Indian districts. It was subsequently extended to all the districts of the country. Table 1 shows the different phases of the implementation of NREGA.

**Table 1: Different Phases of NREGA in India**

	Total	Implementation of NREGA		
		Phase I (FY 2006-07)	Phase II (FY 2007-08)	Phase III (FY 2008-09)
<b>States</b>	28	All 28	All 28	All 28
<b>Districts</b>	605	200	130	275

**Source:** www.nrega.nic.in

**Note:** 1. Years represents in parenthesis are the commencement years for the three phases. 2. FY: Financial Year.

The objective of the Act is ‘enhancement of livelihood security of rural households by providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work’. Simply put, the primary objective of the Act is to ‘*provide 100 days of unskilled manual work in rural areas*’<sup>5</sup>.

The further purpose of NREGA, through the potential outcome of its effective implementation, is also to influence several core and non-core agenda items of ILO. These purposes include stopping the flow of distress rural-urban migration, curbing child labour, alleviating poverty, and making villages self-sustaining through productive assets creation (such as building roads, cleaning up of water tanks, soil and water conservation works, etc.). The works undertaken are meant to regenerate the rural natural resource base, which in turn may result in sustainable livelihoods for residents. The Act was mainly targeted to benefit landless labourers, Scheduled Castes (SC), Scheduled Tribes (ST)<sup>6</sup>, and women.

---

<sup>5</sup> www.nrega.nic.in

<sup>6</sup> According to the Constitution of India, the weaker sections of the society include Scheduled Castes (SC) and Scheduled Tribes (ST).

One of the major reasons for the failure of many well intentioned schemes in India is the persistence of corruption and middlemen. Careful forethought has been given to the entire procedure of execution and implementation of the projects under NREGA. Its execution starts at the office of Ministry of Rural Development and culminates at the Gram Panchayat. The benefits are aimed toward percolating down to the unskilled labourers. To make the procedure corruption and contractor free, multiple filters have been intentionally put in place. However, these filters slow down the execution process to some extent. This bureaucratic journey is mapped in Annexure 1.

### **5.1. Genesis of NREGA**

In order to understand the genesis of NREGA, it is helpful to first look at the national context for the emergence of NREGA. One of the main drivers of rural unemployment is the erosion of livelihoods in Indian villages. A number of rural employment programmes were launched by successive Governments of India over the years (Annexure 2). However, these programmes have achieved only partial success. The threat of collapse of the rural economy was increasingly becoming real. In this context, NREGA has come at a crucial time as a novel solution.

In 2005, the Central Government of India was run by an alliance of political parties known as United Progressive Alliance (UPA). As discussed earlier, a National Advisory Council (NAC) was set up as an apex body to advise the Indian Government on various political and socio-cultural and economic matters. NAC was responsible for designing the precursor to NREGA. It was also responsible for initiating the legislative process aimed at bringing it into existence.

### **5.2. NREGA – The Facts**

NREGA is operational in all the districts of India at present. The data related to the progress of the Act is dynamic and is updated on a web site set up by the Ministry of Rural Development. A review of the scope of the Act, the nature of projects undertaken, the funds allocated to the programme, and employment generated as a result are discussed below.

### **5.2.1. Coverage**

NREGA was implemented in all the 605 districts of India in three different phases. In the first phase, it was implemented in 200 of the most backward districts. In the second phase, it was implemented in 130 districts and in the third phase the remaining districts were covered. The data of various facets of NREGA's implementation at the block and village level has not been published widely by Government bodies.

### **5.2.2. Nature of Projects Undertaken**

Under NREGA, different projects are undertaken to build productive assets at the village level. These include water conservation, irrigation to land owned by SC or ST members, rural connectivity, and land development. According to Ministry of Rural Development, a large percentage of the projects in the area of water conservation were undertaken and finished by December 2007 (Report of Ministry of Rural Development, 2008: pp.31). These included water harvesting, flood control and protection, drought proofing, micro-irrigation works, and renovation of traditional water bodies (Report of Ministry of Rural Development, 2008: pp.36).

### **5.2.3. Funds**

The funds are provided by both by the Central and respective State Governments. The Central Government contributes 90 per cent of the funds and the rest is provided by the State Government (Thakur, 2007). Phase I was implemented from 2006 and Phase II started from 2007. The average funds spent per district for these phases were over Rs. 44 crores. The Government has allocated over US \$ 2 billion for each year of implementation of the Scheme. A large percentage of this amount (over 75 per cent) has already been utilized for providing employment. Information about Phase III of the Act is trickling in.

### **5.2.4. Employment Generated**

During Phase I, over 2 Crore (20 million) households demanded employment and almost all households (over 99 per cent) were provided employment. Similar results were

achieved during much of Phase II. About 62 per cent of the new employment generated by NREGA in Phase I and II was utilized by the SC and ST communities. The latest figures (includes some part of Phase III) indicate that SCs have 29 per cent and STs 25 per cent of participation in the programme. The participation of women in the Scheme has also grown from 41 per cent in 2006-07 to 42 per cent in 2007-08 (Lubhaya, 2008). Now the participation rates stand at 47 per cent.

### **5.3. Impact on Various Sectors**

NREGA has already made a measurable impact on various socio-economic predicaments of India. In this section, the impact of NREGA on areas such as rural-urban migration, child labour, women, and socially backward classes, among others, are reviewed.

#### **5.3.1. Impact of NREGA on Rural-Urban Migration<sup>7</sup>**

Rural-urban migration has played a significant role in the urbanization process of several countries and continues to rise at a decreasing rate. However such large scale migration or 'rural spillover' has led to many urban problems. These include over-burdened infrastructure of the cities, urban poverty, and crime. Though the migrants benefit individually, it leads to a decline in social welfare of both rural and urban areas (Oberai and Bilsborrow, 1984). Similar problems are being experienced in India.

NREGA, by guaranteeing employment, has alleviated the problem of rural-urban migration. It is assumed that it has impacted both the seasonal and the permanent migration trends. Seasonal migrations were reduced because rural workers secured employment during the lean season at their home districts. Permanent migrations are also likely to be reduced because of rural development. A review of studies undertaken

---

<sup>7</sup> Migration is a major area of concern for the Indian society. Uneven development, inter-regional disparities, and disparities amongst different socio-economic classes are the main causes of migration. The landless poor who mostly belong to lower castes, indigenous communities and economically backward regions constitute the major portion of migrants. Migration in India is predominantly short distance with around 60% of migrants changing their residences within their district of birth. Another 20% of the migrants move within their state, while the rest move across the inter-state and international boundaries. Successive census data taken every decade from 1971 to 2001 indicate a steady rise in migrant population. Migrant population increased from 167 million in 1971 to almost twice the number to 315 million in 2001.

on NREGA and migration are presented in Table 2. Findings indicate the positive impact NREGA has had on reducing migration (partial support is indicated by the PACS study).

**Table 2: Review of Research Findings**

<b>Author</b>	<b>Study Period</b>	<b>Scope</b>	<b>Findings</b>	<b>Remarks</b>
Dreze and Khera (2009)	May- June 2008	1000 randomly selected NREGA workers	More than half (57 per cent) of the sample workers have stopped migrating.	Survey conducted in 6 states having 10 districts having 100 Gram Panchayats
Roy, Raja, and Dreze (2007)	June-July 2008	Villupuram District, Tamil Nadu	Act has led to lowering of migration. Minimum wage of Rs. 80 is being paid to workers in all areas studied.	Social audit conducted by council members.
Ministry of Rural Development (2007)	November 2007	Bilaspur District, Chhattisgarh	Migration for livelihood has gone down from 26,090 in 2002-03 to 8,691 in 2006-07.	Migration reduced by 66.7 per cent.
Poorest Area Civil Society (PACS) (2008)	October 2008	3265 households from Rajnagar Block, Chhatarpur District, Madhya Pradesh	59% are migrating to Delhi and Jammu.	Survey conducted in 10 villages. NREGA has given only partial relief.

### **5.3.2. Impact of NREGA on Child Labour**

Child labour is a problem of extra-ordinary proportion in the Indian context. While estimates vary, Census data of 2001 reveals that there are over 12 million child labourers, of them many are in the rural areas<sup>8</sup>. It is also a core programme of ILO and is well known issue internationally.

While NREGA did not explicitly seek to address the issue of child labour, one study suggests that NREGA was effective in tackling the problem to some extent. A study was carried out in some remote villages of Dungarpur district on child migrant labour (Burra, 2007). Dungarpur district is known for large-scale migration of children between the ages of 10 to 14 to work in the BT cotton fields in Gujarat. Children also migrate to Gujarat to work in brick kilns, in dhabas (Indian restaurants) and workshops, in textile markets, and on construction sites. The villagers revealed that there has been more than 20 per cent

<sup>8</sup> <http://www.ilo.org/public/english/region/asro/newdelhi/ipec/responses/india/index.htm>

reduction in the incidence of migration amongst children. According to the villagers, the reduction in child labour is a direct result of the impact of NREGA. Also, if residential schools for 10 to 14 year old children are built, then more parents would keep their children in school. School teachers report that NREGA had reduced migration by 10 to 20 per cent and school enrolment and retention had improved by 25 per cent. This was largely because parents were staying back because of work availability.

### **5.3.3. Impact of NREGA on Women**

The condition of women and their future in India is a complex topic in itself and cannot be adequately covered here. Suffice it say that lack of empowerment of women and gender bias in all aspects of life in India are well known internationally. NREGA offers a unique employment opportunity for rural women, who rarely get a chance to earn their own income.

Women workers account for nearly half of the workers employed in NREGA works so far. This share of participation of women is higher than the national average in rural areas. It can be seen from Table 3 that only 36 per cent of all rural workers in 2004-05 in India were women.

The pattern of state-wise variations is interesting. Women's involvement is much higher than their overall work participation in the southern states. This is especially true in Kerala, where women's participation in paid work has traditionally been low. Tamil Nadu, which has had high women's work participation, shows even higher involvement in NREGA, with women accounting for nearly 80 per cent of the work under this scheme.

Among the northern and eastern states, however, the pattern is different. Data indicates that proportionately fewer women are working in NREGA than in other rural work. These gaps are especially marked in Punjab, Uttaranchal, and Jammu and Kashmir. The outlier in the north is Rajasthan, where above two-thirds of workers were women. Rajasthan notwithstanding, in several states, women's participation is not only lower than their share of total workers, but is also well below the mandated 30 per cent.

**Table 3: Participation of Women in NREGA work**

States	Share of Women		
	In total rural Workforce	In NREGA	Difference
Andhra Pradesh	44.1	58.0	13.9
Assam	26.5	27.8	1.3
Bihar	21.2	25.6	4.4
Chhattisgarh	44.7	42.2	-2.5
Gujarat	45.5	38.1	-7.4
Haryana	34.4	32.2	-2.2
Himachal Pradesh	47.4	43.2	-4.2
Jammu & Kashmir	31.0	0.4	-30.6
Jharkhand	36.0	30.3	-5.7
Karnataka	41.9	51.6	9.7
Kerala	32.6	66.0	33.4
Madhya Pradesh	38.3	42.6	4.3
Maharashtra	44.5	44.1	-0.4
Orissa	35.2	35.0	-0.2
Punjab	34.2	0.2	-34.0
Rajasthan	42.6	69.6	27.0
Tamil Nadu	43.4	79.1	35.7
Uttaranchal	45.1	14.3	-30.8
Uttar Pradesh	30.4	32.4	2.0
West Bengal	22.8	21.3	-1.5
<b>India</b>	<b>36.2</b>	<b>48.9</b>	<b>12.7</b>

**Source:** Adapted from Ghosh (2009);

**Note:** 1. Share of workforce calculated by applying NSS 2004-05 usual status work participation rates of rural men and women (PS+SS) to Census rural population projections for 2004.  
2. Share of NREGS work from [www.nrega.nic.in](http://www.nrega.nic.in)

The states where NREGA has led to a significant increase in women's paid work, there are likely to be substantial social implications as well. These would be in addition to other changes, such as the decline in distress migration and the improvement in food consumption among certain families. Not only does NREGA provide money incomes directly to those women participating in it, in many states the wage delivery mechanism is linked to the opening of post office or bank accounts. This involves the access of a much greater number of women in institutional finance from which they have been largely excluded. Intra-household gender relations are also likely to be affected, but these changes will occur over a longer time. Nonetheless, this greater participation of women in NREGA, particularly in some states, is clearly a positive development.

### 5.3.4. Impact of NREGA on Backward Classes

The backward communities in India have benefited from NREGA. This is revealed in Table 4 which provides a state-wise analysis of the Act. It is clear that compared to the share of population in India of SCs and STs, the participation rates in NREGA has been much higher in almost all states.

**Table 4: Share of Scheduled Castes and Scheduled Tribes in NREGA Work**

States	Share of Scheduled Castes			Share of Scheduled Tribes		
	In total Population	In NREGA	Difference	In total population	In NREGA	Difference
Andhra Pradesh	16.2	26.5	10.3	6.6	13	6.4
Assam	6.9	9.8	2.9	12.4	33.64	21.2
Bihar	15.7	53.3	37.6	0.9	1.2	0.3
Chhattisgarh	11.6	16.8	5.2	31.8	39.3	7.5
Gujarat	7.1	12.1	5.0	14.8	55.3	40.5
Haryana	19.3	59.6	40.3	0.0	0.0	0.0
Himachal Pradesh	24.7	31.0	6.3	4.0	7.8	3.8
Jammu & Kashmir	7.6	0.0	-7.6	10.9	28.1	17.2
Jharkhand	11.8	18.8	7.0	26.3	41.3	15.0
Karnataka	16.2	27.5	11.3	6.6	15.2	8.6
Kerala	9.8	16.0	6.2	1.1	8.6	7.5
Madhya Pradesh	15.2	23.3	8.1	20.3	41.8	21.5
Maharashtra	10.2	19.1	8.9	34.4	53.4	19
Orissa	16.5	23.5	7.0	22.1	34	11.9
Punjab	28.9	97.0	68.1	0.0	0.0	0.0
Rajasthan	17.2	29.6	12.4	12.6	23.9	11.3
Tamil Nadu	19.0	58.8	39.8	1.0	1.7	0.7
Uttaranchal	17.9	54.3	36.4	3.0	1.6	-1.4
Uttar Pradesh	21.1	27.1	6.0	0.1	5.0	4.9
West Bengal	23.0	39.1	16.1	5.5	14.8	9.3
<b>India</b>	<b>16.2</b>	<b>30.9</b>	<b>14.7</b>	<b>8.1</b>	<b>24.1</b>	<b>16.0</b>

**Source:** Adapted from Ghosh (2009);

**Note:** 1. Share of population from Census of India 2001;

2. Share of NREGS work from www.nrega.nic.in.

Unlike in previous schemes, STs have participated actively in NREGA. For example, in Gujarat only 15 percent of population belongs to STs. However, over 55 percent participated in NREGA. It may be noted that Phase I of implementation of the Act targeted backward districts that incidentally also had high share of STs. This fact has to be factored in to get a balanced view of the impact of the programme (Ghosh, 2009).

**Box. 1: Field Survey on Implementation of NREGA<sup>9</sup>**

Village: Madalakote, Gram Panchayat: Shrinivaspura, Taluk: Nelamangala,  
District: Bengaluru Rural, State: Karnataka

Madalakote village is located a few kilometers away from National Highway 4 that connects Chennai to Pune via Bengaluru. The village is located approximately sixty kilometers northwest of Bengaluru City. It has around 250 households and the population of the village is approximately 1500. Madalakote belongs to the Shrinivaspura Panchayat in which other smaller habitations exist such as Morasahalli, Hajipalya, Jogipalya etc. Madalakote is the larger of these habitations, and unlike others, it has a government hospital, veterinary hospital, a high school, post office, and a co-operative society.

The inhabitants of the village are primarily agricultural workers. Ragi is the main crop. Given the proximity of the village to Bengaluru city, over 400 people commute to the city on a daily basis for work. However, a small portion of the people in the village have their own land. Many others are landless and they labour in other fields for which they earn around Rs. 100 per day on a seasonal basis.

NREGA was implemented in this village as part of the third phase of implementation. The works started in February 2009. Two projects in the village have been taken up and completed. The first included the restoration of a water tank. The second work related to the construction of a drainage system. Forty persons demanded work and all forty were given employment. Out of these, 13 were men and the rest women. This signifies a high participation rate of women in the village in NREGA works. Four persons belonged to the SC community.

Post office savings bank accounts were created for each person. All the workers received Rs. 82 per day for working in NREGA projects. The total funds dispersed so far was in two phases – Rs. 27,000 and Rs. 28,000 for each phase. All the forty workers worked for 100 days (as per the Act). Work hours usually were from 9 am to 5 pm with Sundays as holidays.

---

<sup>9</sup> A field visit and study was conducted by the authors on May 17, 2009 through personal visit to the site and through a number of unstructured interviews.

Two workers were interviewed to determine the conditions of work and the benefits received. Mr. Srikanta Murthy worked in the NREGA projects during the lean season. Similarly, Ms. Venkatalaxmamma was working as agricultural labourer earlier. She chose to work on NREGA projects during off-season of agriculture. It can be inferred that NREGA has given these workers additional income opportunities besides agricultural income.

#### **5.3.4. Summary of the Net Impact of NREGA**

As seen from the information presented above, NREGA has reduced rural-urban migration, mitigated child labour, created greater opportunities for women, and increased the participation of backward sections of society in productive employment. Various works have created productive assets at the rural and local level that contributes toward rural development. A total of 2.7 million works were undertaken till date. Out of these, 1.2 million works are finished and the remaining is under progress<sup>10</sup>. The challenge, however, is to continue projects that would further build productive assets on a sustained basis. Given the reduction in rural-urban migration, reduction in child labour, and greater social inclusion and rural development; it may be inferred that the issue of rural poverty has been addressed to some extent. In fact, 44.6 million households have been provided employment under the Act. Given the multiple benefits yielded by the programme across the entire nation, that too in a historically unprecedented manner and unmatched by other such programme globally; NREGA has elements of what can be called rightly as an “innovative policy decision”.

The challenge of effective implementation of the Act would require planning labour-intensive works for the needy poor on a continuous and sustained basis. These works must build the right kind of assets to promote development of regional and local economy. To ensure that the impact of the Act is sustainable and lasts over the longer term, these assets must be managed well and in an equitable way to generate benefits for the poor, as well as to promote pro-poor economic growth. In this context, NREGA

---

<sup>10</sup> [www.nrega.nic.in](http://www.nrega.nic.in) accessed on May 18, 2009.

should be seen more as a livelihood-generating programme than a wage-earning scheme. It also offers a unique opportunity to turn around rural development.

An employment Act such as NREGA is vast in scope and application. It has impacted so many different areas and communities of the Indian society. It is to be expected that such large programmes will obviously have its ideological critics. Further, the implementation of the Act will have its difficulties; including - the benefits not reaching a number of citizens, corruption, disruption by contractors and other middlemen, slow progress on works etc. Several other potential beneficiaries of NREGA may be dissatisfied with various aspects of implementation<sup>11</sup>. The thrust of the paper is not to objectively evaluate the success and failure of the program (although initial results point strongly to the success) but to highlight the innovative nature of policy-making and how governments can intervene in the labour markets and correct for imperfections, especially, in a country such as India.

To summarize, the model presented in the paper captures facets of this remarkable policy achievement that is not possible to describe adequately through the most advanced thinking in the area of management and social sciences. The general framework presented in the paper attempts to capture key facets and dynamics of this extra-ordinary legislation.

## **6. Potential Future Applications of the General Model**

The framework presented in the paper is versatile. It can be applied to address various social, economic, and political problems. The enduring problem of child labour is taken up as a potential future application although it relates to the 'core programme' of ILO. The continued poor condition of millions of children poses a dynamic and shocking challenge to policy sciences, economics, and other areas of social science.

First, the problem of child labour has to be fully studied with its antecedent and consequent factors (Chart 4). Arguably, poverty is a prime cause of child labour (F1a). Underemployment of parents can also result in the family forcing the child to work (F2a).

---

<sup>11</sup> For more details, please see Aggarwal (2008), Dogra (2008), Dreze et.al. (2008), and Dreze and Khera (2009).

Employers may adopt exploitative means in order to sustain their businesses and may draw upon child labour given their need for cheap labour (F3a).

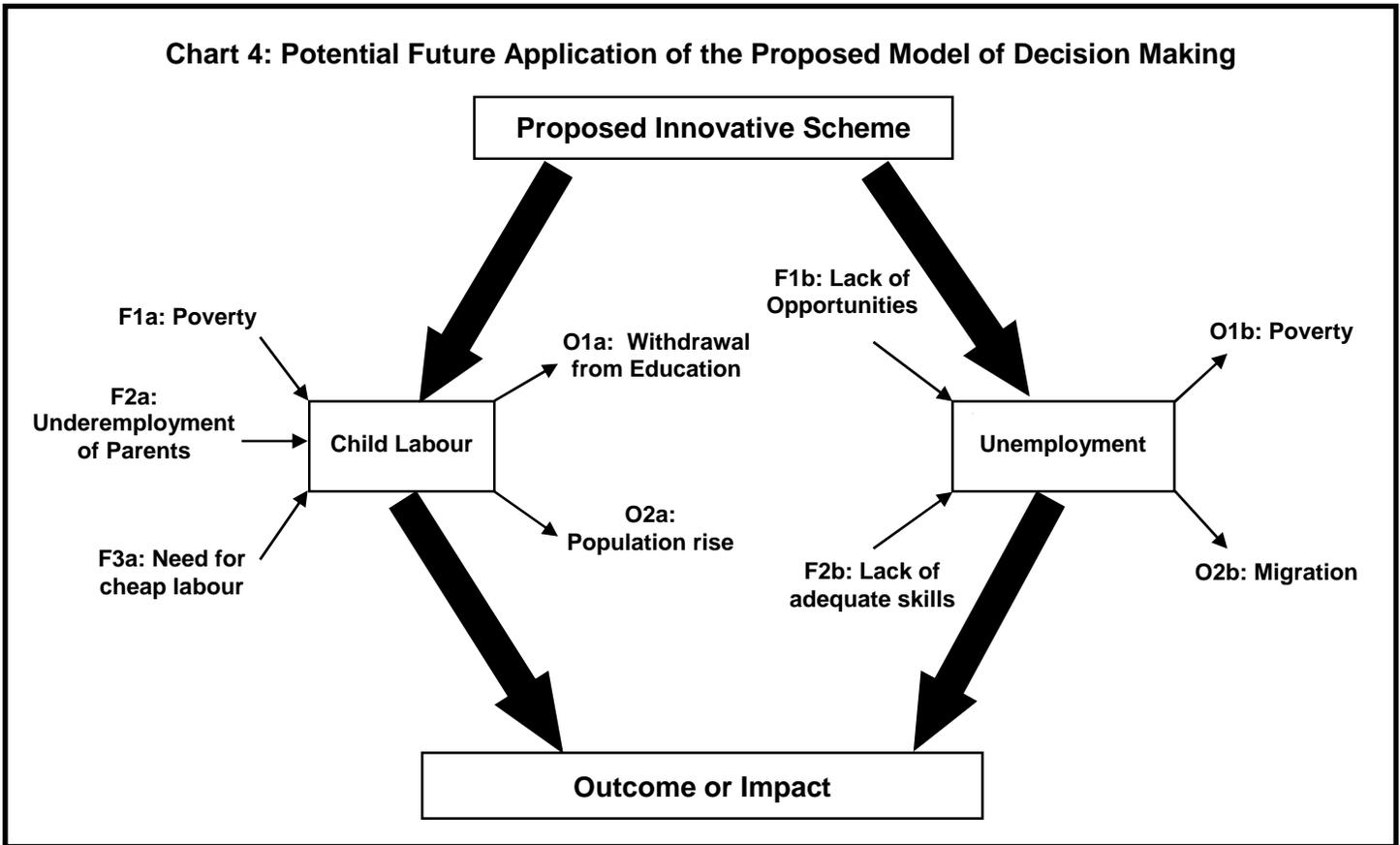
Similarly, the consequences of the problem can also be listed. The persistence of the problem justifies poor families to have more children (O2a). Also children at work cannot participate in the educational process (O1a).

Second, the problem of unemployment and its antecedent and consequent factors are considered. Lack of opportunities in rural areas is a cause for unemployment in the rural regions (F1b). Lack of adequate skills is also considered as a cause for unemployment (F2b).

Unemployment can erode the income opportunities thereby making the poor poorer (O1b). Unemployment also results in migration from rural areas to urban centers (O2b).

By analyzing the characteristics of the two problems, the positive and negative characteristics of each problem can be appreciated separately. The negative characteristic and causal factor of unemployment is lack of employment opportunities in certain geographical regions (F1b). Similarly, the need of employer for cheap labour is the causal factor for child labour (F3a). An innovative scheme may be designed in such a way that these factors potentially balance each other off. By combining unemployment and child labour schemes, an innovative scheme is possible. The paper has already reviewed evidence of how NREGA has had an impact of child labour to some extent. By directing the unemployed to prospect opportunities wherein children are employed; the enormity of the problem can be somewhat mitigated with lesser resources. This subject can itself constitute a separate area of further research.

**Chart 4: Potential Future Application of the Proposed Model of Decision Making**



## 7. Implications of the Model for Policy-making and Research

As can be seen from the previous section, the general model can be applied to a variety of social, economic, and political issues. Particularly, it may be helpful to review certain policy and research implications. Implications for policy-making and research are discussed below.

### 7.1. Policy Implications

The proposed model is useful in areas where the core or non-core programmes have not been fully implemented. Here, the States may lack resources and may not be able to support certain programmes fully. It is important to find an innovative approach that simultaneously tackles multiple social and economic ills; or addresses core issues and simultaneously tackles non-core items within the solution mix. By crafting such policies and implementing them well, success in hitherto seemingly impossible public problems can be achieved. The promising initial results of NREGA contra-indicate the prescription

given by the World Bank to States to deregulate labour statutes. The World Bank's studies on Doing Business, Employing Workers Index, and its implications, prescribe deregulation as a path to national prosperity; this has been questioned on methodological and conceptual grounds by ILO scholars (Berg and Cazes, 2007).

The promising initial results of NREGA in a diverse, multi-ethnic, pluralistic country such as India strongly suggests that such innovative programmes can also be applied in other countries of the world. States must learn from the Indian experience in NREGA and suitably modify it to their unique needs and circumstances. Also, recent thinking at ILO suggests that case studies based on specific nations can provide an accurate measure of the positive impact of labour regulation. World Bank's cross-country indices of employing workers index can have flawed policy implications (Lee et. al., 2008).

The design of NREGA was such that learning from the failure of previous schemes was factored in and accounted for. Also, careful attention was paid to the implementation portion of the scheme. As discussed in the paper, the execution cycle was intentionally designed to be lengthy to ensure greater compliance. Similar considerations can be incorporated for framing future policies.

## **7.2. Research Implications**

Evaluation research is an important component of any change intervention. Large State sponsored programmes would benefit from having an evaluation research design as part of the scheme itself. This will allow for appropriate data to be generated, it will sustain momentum as the implementation steps progress, and it will enable the lessons from success or failure to be carried forward for future schemes. NREGA has some elements of these components built into it. Also, Information Technology capabilities have been leveraged to push the programme forward.

In order for research efforts to mature and address significant questions, it is necessary to overcome discipline related limitations and collaborate across different research fields. This is true especially when an attempt is made to study large, complex, and ambitious policy initiatives. NREGA is well suited for such a multi-disciplinary study.

## **8. Concluding Comments**

The paper introduces a framework that is a conceptual breakthrough in how policy-making can be made more effective in solving complex and difficult problems. This general model can be applied to various socio-economic challenges.

In recent times, management thinking is being applied to address social and economic issues. Similarly, management scholars are being influenced by larger social and economic considerations. This is a relatively recent phenomenon and is witnessed through the initiatives of the UN Global Compact (UN Global Compact, 2008). This paper must be viewed in this broader intellectual progress.

The framework provided in this paper is used to study an innovative policy in the Indian context, through the example of NREGA. By doing so, the relevance of the model in studying ground-breaking schemes is demonstrated. The application of the framework to various other scenarios suggests that it is a unique technique with great potential to address social and economic evils.

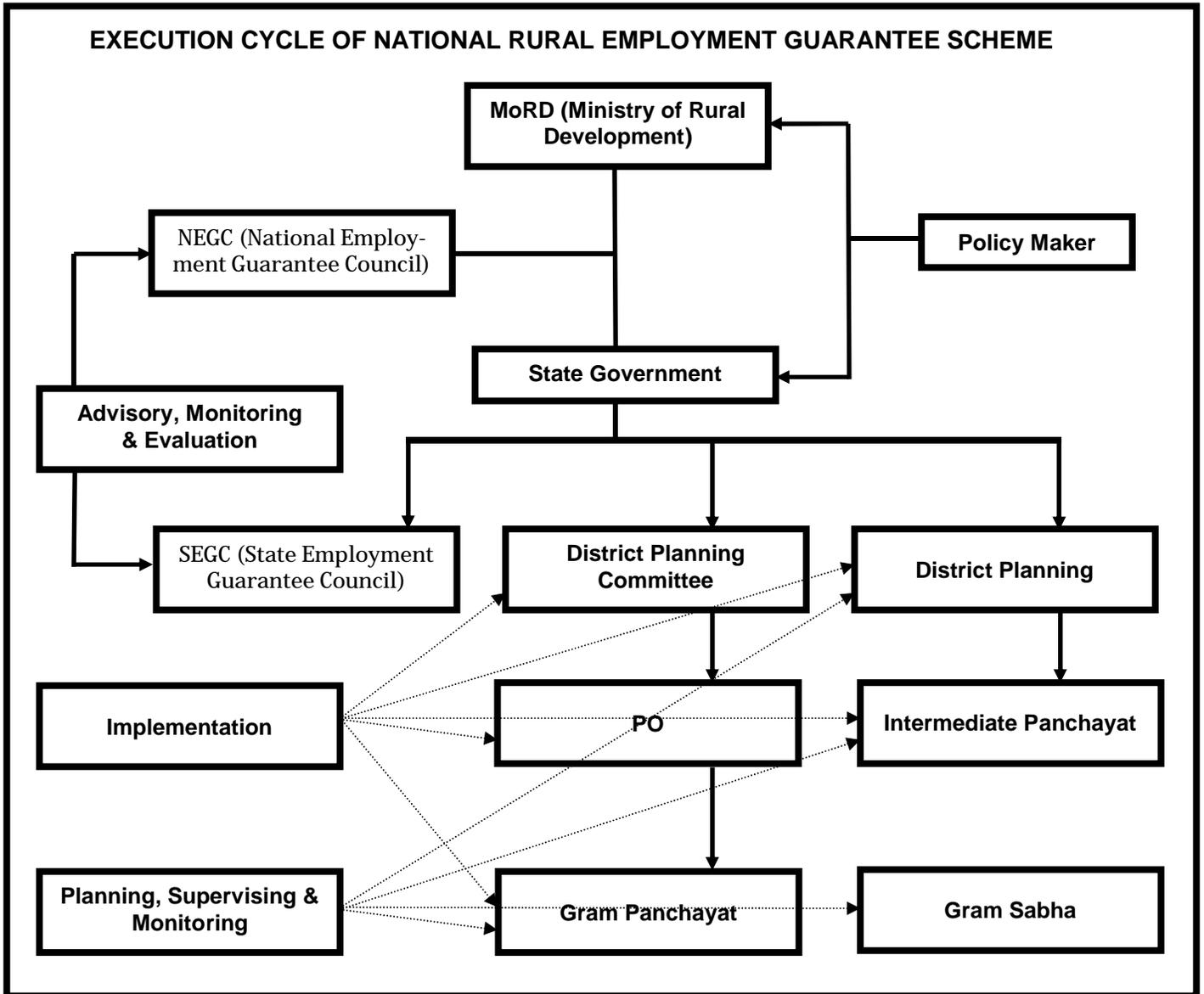
## References

1. Aggarwal. Y (2008) "From the Bottom Up", *Special Report – Business India*, May.
2. Allison. G and P Zelikow. (1999) "Essence of Decision", 2nd ed. New York: Longman.
3. Berg. J and S Cazes (2007) "The Doing Business Indicators: Measurement Issues and Political Implications", Employment Analysis and Research Unit, Economic and Labour Market Analysis Department, International Labour Organization, Geneva.
4. Bertola. G (2009) "Labour Market Regulation: Motives, Measures, Effects", Conditions of Work and Employment Series No. 21, International Labour Organization, Geneva. (<http://www.ilo.org/public/english/protection/condtrav/pdf/21cws.pdf>)
5. Burra. N (2007) "NREGA and its impact on child labour: field notes from Dungarpur". ([www.levy.org/pubs/EFFE/NREGA\\_and\\_its\\_impact\\_on\\_child\\_labour.pdf](http://www.levy.org/pubs/EFFE/NREGA_and_its_impact_on_child_labour.pdf))
6. Census of India, *Various Reports on Migration*, 1971, 1981, 1991, and 2001.
7. Constitution of India  
(<http://lawmin.nic.in/coi/coiason29july08.pdf>)
8. Cohen. M D, J G March. and J P Olsen. (1972) "A Garbage Can Model of Organizational Choice", *Administrative Science Quarterly*, 17: pp. 1-25, March.
9. Dogra. B (2008) "NREGS Doesn't Live Up To Promises", *Civil Society Magazine*, March.  
(<http://59.92.116.99/eldoc1/h40a/01mar08csy1.pdf>)
10. Dreze. J, R Khera. and Siddhartha. (2008) "Corruption in NREGA: Myths and Reality", *The Hindu*, Chennai, January.  
(<http://www.thehindu.com/2008/01/22/stories/2008012254901000.htm>)
11. Dreze. J and R Khera. (2009) "The Battle for Employment Guarantee", *Cover Story – Frontline Magazine*, pp: 4-26, January 16.  
([http://info.worldbank.org/etools/docs/library/245844/Public%20workd\\_The%20battle%20for%20employment%20guarantee.pdf](http://info.worldbank.org/etools/docs/library/245844/Public%20workd_The%20battle%20for%20employment%20guarantee.pdf))
12. French. W L, C H Bell. and V Vohra. (2008) "Organizational Development – Behavioral Science Interventions for Organisation Improvement", Pearson Prentice Hall Publication, pp: 149-150.
13. George. A L (1972) "The Case for Multiple Advocacy in Making Foreign Policy", *American Political Science Review*, 66(3): 751-85.
14. Ghosh. J (2009) "Equity and Inclusion through Public Expenditure: The potential of the NREGS", Paper presented at the International Conference on NREGA, Ministry of Rural Development and ICAR, January.  
(<http://www.macrosan.com/pol/jan09/pdf/NREGS.pdf>)

15. Harris. J and M Todaro. (1970). "Migration, Unemployment, and Development: A Two-Sector Analysis", *American Economic Review*, March; 60(1):126-142.
16. Janis. I L (1982) "Groupthink: Psychological Studies of Policy Decisions and Fiascoes", 2nd ed. Boston: Houghton Mifflin.
17. Lall. S V, H Selod. and Z Shalizi. (2006) "Rural-Urban Migration in Developing Countries: A Survey of Theoretical Predictions and Empirical Findings", World Bank Policy Research Working Paper No. 3915, May.  
(Available at SSRN: <http://ssrn.com> - Abstract =920498).
18. Lee. S, D McCann. and N Torm. (2008) "The World Bank's "Employing Workers" Index: Findings and Critiques – A Review of Recent Evidence", *International Labour Review*, 147 (4): pp 416-432, December.
19. Lubhaya. R (2008) "Implementation of NREGA – The Rajasthan Experience", Rural Development & Panchayati Raj Department, Government of Rajasthan.  
([www.rdprd.gov.in/PDF/Implementation%20of%20NREGA-8.10.08.ppt](http://www.rdprd.gov.in/PDF/Implementation%20of%20NREGA-8.10.08.ppt))
20. March. J G and H A Simon. (1958) "Organizations", New York: Wiley.
21. MICA-EDC (2008) "NREGS West Bengal: A Study of Sustainable Livelihood Models", MICARVAAN: A Rural Immersion Programme, Ahmedabad, September.
22. Mintzberg. H, D Raisinghani. and A Theoret. (1976) "The Structure of 'Unstructured' Decision Processes", *Administrative Science Quarterly*, 21: pp. 246-275.
23. Naidu. M C and K D Ramaiah (2006) "Child Labour in India – An Overview", *Journal of Social Science*, 13(3): 199-204.
24. Oberai. A and R E Bilsborrow. (1984) "Theoretical Perspectives on Migration", in R.E. Bilsborrow, A.S. Oberai, and G. Standing (Eds.), *Migration Surveys in Low-Income Countries: Guidelines for Survey and Questionnaire Design*. Chapter 2. London and Sydney, Australia: Croom Helm, for the International Labour Office.
25. PACS Report (2008) "Migration in Bundelkhand – Dithering, Division and the Damage Done", Madhya Pradesh and Chhatisgarh.
26. Porras. J I (1987) "Stream Analysis: A Powerful Way to Diagnose and manage Organizational Change", Reading, MA: Addison-Wesley Publishing Company.
27. Roy. A, A Raja. and J Dreze. (2007) "NREGA Cuts Rural Migration to Cities", *Deccan Chronicle*, Chennai, August 5.  
(<http://nrega.nic.in/news/0314082007.pdf>)
28. Report of Ministry of Rural Development (2006) "Operationalising NREGS", Department of Rural Development, Government of India, New Delhi, January.  
(<http://pmindia.nic.in/nac/concept%20papers/nrega13jan.pdf>)

29. ----- (2007) "NREGS: An Introduction", Annual Report NREGS (2006-07) Department of Rural Development, Government of India, New Delhi. ([www.rural.nic.in/AER/CH/AER\\_bilaspur.pdf](http://www.rural.nic.in/AER/CH/AER_bilaspur.pdf))
30. ----- (2008) "National Rural Employment Guarantee Act: Two Years 2006-08", Department of Rural Development, Government of India, New Delhi.
31. Simon. H A (1972) "Theories of Bounded Rationality", in C B Mc Guire and R Radner (Eds.) *Decision and Organisation*, Chapter 8: pp: 161-176; North Holland Publishing Company.
32. ----- (1975) "Bringing Science and Technology to Bear on Public Policy Decisions", *Science and Public Policy*, November.
33. ----- (1994) "Decision Making and Administrative Organization", *Public Administration Review*, IV (I), Winter.
34. Thakur. R S (2007) "Poverty Reduction: A Recent Policy Initiative in India", Government of Rajasthan, India
35. UN Global Compact (2008) "Corporate Citizenship in the World Economy", UN Global Compact Office. United Nations, New York City, NY, USA October. ([http://www.unglobalcompact.org/docs/news\\_events/8.1/GC\\_brochure\\_FINAL.pdf](http://www.unglobalcompact.org/docs/news_events/8.1/GC_brochure_FINAL.pdf))
36. [http://changeanalytix.com/software\\_streamanalysis.asp](http://changeanalytix.com/software_streamanalysis.asp)
37. <http://www.ilo.org/public/english/region/asro/newdelhi/ipecc/responses/india/index.htm>
38. <http://www.nrega.nic.in>

## Annexure 1



Source: Adapted from MICA-EDC (2008) "NREGS West Bengal: A Study of Sustainable Livelihood Models"

## Annexure 2

<b>Wage Employment Programmes in India</b>		
<b>No.</b>	<b>Name of the Programme</b>	<b>Period</b>
1.	National Rural Employment Programme (NREP)	1980-89
2.	Rural Landless Employment Guarantee Programme (RLEGP)	1983-89
3.	Jawahar Rozgar Yojna (JRY)	1989-99
4.	Employment Assurance Scheme (EAS)	1993-99
5.	Jawahar Gram Samridhi Yojna (JGSY)	1999-2002
6.	Sampoorna Grameen Rozgar Yojna (SGRY)	Since September 2001
7.	National Food For Work Programme (NFFWP)	Launched in Nov. 14, 2004
8.	National Rural Employment Guarantee Act	Launched in Feb. 02, 2006

Source: Various Departments of Government of India.