PLANNING FOR RESULTS:
THE PUBLIC ACCOUNTABILITY INFORMATION SYSTEM

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March 2007

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1 INTRODUCTION

Over the last five years there has been increasing recognition that the traditional focus on financial allocations and expenditure may have weakened the incentive for outcomes that actually benefit the poor and less well off, who are the presumed beneficiaries of these expenditures. Since the 1980s concerned citizens and leaders have speculated about how much of program expenditure actually reaches the intended beneficiaries, with guesstimates ranging from 15% to 25%.[1] Whatever the precise number, there is a clear need to improve the quantity and quality of output produced by these expenditures and delivered to the intended beneficiaries. Planning Commission Working paper No. 1/2006 has presented suggestive calculations showing that in the year 1999-2000 the amount of money spent on a few major poverty alleviation programs would have been sufficient to eliminate poverty during that year. Improvement in the delivery mechanisms can therefore have a dramatic effect on the lives of the poor.

Central Schemes and Centrally sponsored schemes come directly under the purview of the Central government. As the Planning commission has the authority to allocate and approve funds for these schemes,[2] it also has the authority to require the setting up of systems of operational planning and management that generate information needed to monitor these programs. A substantial part of the Central assistance for State plans lies outside 'Normal Central Assistance' and is channelled into programs such as AIBP, ARDP, BRGF and JNURM, whose fund release is approved by the concerned central department and the Ministry of Finance. This note outlines some practical steps that can be taken to improve the output/impact/outcome of central government expenditure over the next five years.[3]

In the case of State Plans and the Normal Central assistance for State plans in which funds are allocated among States on the basis of the modified Gadgil formula, the Planning Commission and the central government does not have the constitutional authority to withhold funds from some States and transfer these to other States. Thus it has little authority to monitor any specific State government program. All it can do is to set up statistical systems that generate macro–economic information on the performance of the State governments over time and make this available to the public, non-government organisations and the media. The identification of appropriate outcomes for data collection and monitoring depend on construction of a hierarchy of goals (general/specific) that

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[1] It should be remembered that the rest includes administrative expenditures as well as leakages.
[2] Within bounds.
[3] The State Government Planning Commissions could also take a similar approach if they are empowered by the State government/ legislatures.

are critical to the overall objective of enhancing public welfare. The frequency with which the macro-aggregate information is generated will determine the periodicity with which the monitoring exercise can be carried out. Annual evaluation is impossible if the vital data (e.g. quinquinial NSS surveys) is generated every 4 years and is made available with a lag of 1 ½ to 2 ½ years. More frequently generated data such as State GDP (particularly agriculture) can be useful if and only if the link between State Plan expenditures on agriculture and the potential increase in GDP from agriculture is specified (through econometric estimates that account for rainfall variation).

The next two sections attempt to address two historical weakness in our planning system. Section 2 deals with the disconnect between the original theoretical reasons for planning (market failure, gap between social and private returns)[4] and the way it has been implemented in practice (marginal changes in incremental allocation driven by political imperatives, starting of new programs by every new government without evaluating whether the old ones have worked). Section 3 tackles the gap between macro planning and detailed operational plans for actual ground level implementation. Section 4 outlines elements of a government management information system (PAIS) suitable for public accountability in a democratic country with a nascent civil society and budding media. Section 5 goes into a little more detail into the issue of monitoring outcome that are an essential part of planning for outcomes. Section 6 concludes the paper.

2 Rationale for Government Expenditure

As the government's intervention expanded into every area of the economy, society and culture, the capacity of the government to directly produce and supply services, to manage financial transfers and subsidies and to enforce laws has become increasingly inadequate. Over the years the capacity and the ability of the government (in terms of quality of personnel and organisational capability) to achieve positive results has deteriorated relative to its ability to cause harm (as this is not affected by professional or organisational capability). As public resources are, by definition scarce and costly (in terms of opportunity cost and distortions) it is essential to use the government's financial and administrative resources where they can make the biggest difference to social welfare.

According to the original theory of planning the emphasis of government expenditure should be on areas where the gap between social and private returns are highest and where market externalities need to be corrected. Future programs, projects and other expenditures should be separated into economically meaningful categories and sub-categories that bear some relationship to these

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[4] Many of the developers of social cost-benefit analysis developed these with Indian planning needs of the 1950s in mind. Some came to India to apply these methodologies and some even worked in the Planning Commission.

economically sound principles. Integrated programs can then be built under these thematic categories in sectors where they are applicable.

We have to distinguish between Public goods and services (G&S) and those which deal with private goods and services. Private goods and services are those that are provided to individuals or specific households (e.g. PDS food, toilets). Public goods & services are provided to groups (e.g. connecting and village/urban roads) and individual usage is difficult or costly to measure. Quasi-public goods fall in between in that part of the benefits can be tracked to individuals, but part is more diffuse and may even accrue to future generations or to a wholly different group in another form. The items and examples are illustrative (*not* comprehensive).[5]

2.1 Public Goods

2.1.1 General

(a) Knowledge generation and dissemination.

- Diffusion of agriculture & allied technology: HYV seeds, re-planting, fish stock, crop varieties, cultivation protocols/practices, Handicrafts & handlooms.

(b) Regulatory Systems, Standards and Certification: Establishment, maintenance, enforcement.
- Health and Safety Standards for products & services, Environmental standards for producers: Dissemination, diffusion and enforcement.
- Development of Standards & Curricula, Testing & certification systems for education & skill development

(c) National statistical system: Macro data collection and statistics. Sector and industry specific data.

(d) Pollution & Environment (Negative externality/Public Bads): Water, Air pollution

2.1.2 Sector Specific
- National security: including Borders, NE, J&K
- Law and order: Police, courts, judges
- Roads: Highways, Inter-connecting roads(habitations), urban roads
- Aquifer planning & management
- Urban and Rural civic planning; Land use planning (agriculture, non-ag; residential, commercial, industrial). Supply of "urban land";
- Communicable, vector borne and epidemic diseases
- Forests, green belts; wild life preservation, bio-diversity

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[5] See also Table 1.

2.2 Quasi-public goods & services

2.2.1 Cross-Sectoral

- Education/Training of high quality educators/teachers/trainers and administrators/planners/managers.
- Preventive health: Public health education and incentives
- Drinking Water Supply system
- Sewerage, Drainage, Sanitation and Waste disposal systems

2.2.2 Rural

- Dams and Canals, Drainage systems.
- Rural electricity Distribution or decentralised production
- Community watershed, water harvesting.
- Marketing channel for agricultural & rural products e.g. B to B website.

2.2.3 Urban

- Urban Transport planning and public transport systems

2.3 Merit (private) goods & services

- Subsidised food: PDS/MDM/nutrition (for BPL)
- Primary education –universal (SSA) and literacy
- National scholarship program and subsidy/support system for socially deprived and economically vulnerable.
- Rural secondary education
- Training/skill development in agriculture (e.g. soil quality) & allied (fish farming)
- Basic health services (universal access) & rural health system
- House sites & toilets (for all/BPL)

2.4 Producer programs / subsidies for employment

(especially socially deprived/ handicapped, economically vulnerable)

- Safety net: NREG (employment for BPL)
- MSP, price risk insurance
- Monsoon risk insurance (subsidy) for small & medium farmers
- Fertiliser subsidy for small & medium farmers
- Tube wells-GW, minor irrigation
- Labour intensive small manufactures e.g. export oriented, handicrafts, handlooms

2.5 Other non-merit transfers and subsidies

Many of these need to be eliminated. Contrary to the basic philosophy of Planning they have seldom (if ever) been subject to rigorous Social cost-benefit analysis and continue because of bureaucratic inertia. Each subject division should identify these with a view to elimination. If necessary an independent evaluation can be carried out or commissioned.

3 PLANNING ELEMENTS

A perennial criticism of Indian Planning has been that Five Year Plans exist only on paper and bear little relation to what happens on the ground. Though this criticism is exaggerated and ignores the limits that the constitution places on various arms and levels of government, it has an element of truth in it. This is the failure to develop and approve detailed operational plans before the financial allocations are made/ released/ spent. Such plans are also essential for ensuring proper monitoring of outputs/ impact/ outcomes and for ensuring public accountability. A re-examination of plan processes and procedures and a filling in of missing elements is required. Planning for government expenditures involves the following steps:

3.1 *Definition of* Objectives

Expenditure planning requires that the objective be neither too broad nor to narrow. This is particularly true in a large, diverse country like India. To take an example from the health sector, health for all is too broad an objective to be meaningful for planning expenditures. At the other extreme, malaria control is too narrow an objective. One appropriate objective in this context may be the 'Eradication of communicable diseases and the control/minimisation of epidemic diseases.'[6]

3.2 *Identification of Specific Goals*

A menu of specific goals must be drawn up to achieve this objective. This menu will include for the objective illustrated above, sewerage and sanitation, clean drinking water, public health education as well as control of vectors, vaccination programs, and R&D.

3.3 *Operational Plans*

Detailed operational plans must be drawn up to achieve these goals. This has been the most neglected and deficient area of our planning process. A plan is not just a fine document of intent but a *series of steps to implement it in a co-ordinated and effective manner.* As health and diseases vary across climatic regions and States each will require a sub-menu with a different emphasis. For instance malaria may be very important in one state while Dengue or Chikangunya is more important in another. Similarly sanitation may be critically deficient in one State and drinking water problems acute in another. These sub-menus (given the relative importance of different diseases) must be translated into detailed measures to be taken at the district/ block/ panchayat / village level as appropriate. For instance if the sanitation plan includes supply of toilets to BPL families, identification of such families must be part of the operational plan.

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[6] There would be other similarly defined objectives for health.

To take another example, if the objective is transport connectivity the State governments must build roads that connect villages to each other and to market centres, railway stations and neighbouring towns. These towns must in turn be connected to each other and to ports and airports. These road links must be identified (source & destination) and defined (quality of road surface, culverts/ bridges needed etc.).

3.4 Management Information System

Effective governance requires a Government Management Information Systems or Government E-management system (GEMs) that will generate information on execution of operational plans and the attainment of specific goals. It is an essential element of the overall Public Accountability Information System (PAIS).

Sustained monitoring of programme inputs or outputs is possible only if information on these is generated by the implementation system. Thus a well defined and designed GEMs is an essential part of any effective expenditure system. The GEMs must generate data on the specific goals that are to be achieved, so that they can be monitored. For instance it is not possible to monitor the achievement of connectivity unless the roads needed have been precisely identified and the GEMS generates information on which have been constructed. Though the monitoring and auditing of financial flows will always be needed,[7] the attainment of physical goals is vital to monitoring and evaluation of government expenditures, because of the wide and varying gaps between financial outlays and the achievement of specific goals.

3.5 Monitoring And Evaluation.

The final stage of the system is the assessment of impact and outcomes. A standard / normal GEMs may not generate sufficient information on the quality of output and the achievement of broader goals and objectives. Independent evaluation systems are therefore needed for this purpose. Often there are multiple programs designed to achieve similar or overlapping objective. Similarly the attainment of a specific objective may depend on many different factors including exogenous factors and different programs. A research program may be needed to sort out the various factors and impacts. A well designed evaluation can produce primary data that is useful for carrying out this research.

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[7] There are numerous gaps in accounting systems for CSS programs and projects that need to be filled. For instance the connection between release of funds by the central government and the actual expenditures for physical inputs by the implementation agency, is currently very obscure.

The frequency of monitoring is dependent on the frequency with which information is generated by the GEMs (annual, quarterly, monthly). In the presence of a GEMs, periodic independent evaluation can act as a cross-check on the accuracy of the GEMs (for instance through the use of satellite maps to determine road and canal completion) as well as provide a picture of the quality of output (e.g. direct sample check of road quality). Further a special evaluation is also useful to determine to what extent the broader objective is being fulfilled (prevalence of communicable diseases). This can help in reformulating specific goals, operational plans and implementation modalities.

3.6 Public Access to Information

The details generated by the GEMs must be put in the public domain in accordance with the Right to Information Act, so as to achieve the objectives of the PAIS system (next section). The objective must be real time supply of information on the internet, starting from the list prepared at the start of the program/project through intermediate monitoring to completion. Any evaluation report regarding the quality of implementation must also be put on the internet. Till such time as the general public has access to the internet at the Panchayat level, local level information may also have to be provided in locally accessible forms such as notice boards and through local radio & print media.

4 PUBLIC ACCOUNTABILITY Information System

The right to Information Act is a vital first step toward improvement of public accountability.[8] The next step must be the generation and publicising of information on all programs / projects carried out in the name of the poor and other citizens. Every program / sub-sector should have an internet accessible Public Accountability Information System (PAIS). Such a system would have two objectives.

(a) To provide information to the targeted population about,

 (i) the expenditure allocated and spent, and the receivers of the expenditure,

 (ii) The major program inputs purchased (sources, amounts) the people hired and their actual attendance record (e.g. teachers),

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[8] The Monograph: *From Poverty To Middle Income: Reforms For Accelerating Growth in the 21st Century, Chintan, April 1999*, optimistically asserted (*sec IV A 4, p36*): "The Official Secrets Act should be replaced by a Freedom of Information Act. The objective of such an act would be to open government to its people to the maximum extent possible, by carefully delimiting the areas (e.g. foreign affairs, defence plans, strategic R&D, personal files) to which secrecy needs to apply. It would be designed to give the public the right to information about decision & actions that affect their lives. This must include every item of expenditure (small or large) made in the name of the poor, the weaker sections, scheduled castes and tribes. .. This one simple act if enacted and enforced can transform the relationship between the government and the people from colonial over-lordship to one of true servant of the people"

(iii)   The output of the program (e.g. no of patients treated, children who attended school) and when available its quality.

These would be put on the website accessible through the internet.

(b) To empower the target beneficiaries (users) to put up their own evaluation of the program alongside the government provided data & information.

Thus for instance in the case of primary education, parents of enrolled children should be able to post their comments on the attendance record of their primary school teacher, the number of children graduated and the quality of the education provided. They could also agree/disagree with the govt. posted data (as per (a) above). This would be a review system patterned on existing systems like Amazon Books in which readers can post book reviews.

A PAIS system must have at its core a financial control and output/ achievement monitoring and evaluation system for each program.

The PAIS system would be a geographically multilevel, multi-layered system in which higher levels would present data after aggregation/integration from lower levels/layers (panchayat, block, district, State).

Most citizens, particularly the poor, for whom many of the projects/programs are intended do not have easy access to the internet. It is therefore essential that the Central and State e-governance projects be fully aware of and facilitate access to this information. For instance, many State governments are installing internet kiosks in Panchayat Ghars and these should allow free access to the PAIS system by local residents, non-profit organisations and local community radio stations.

Community radio can also play an important role in monitoring and increased accountability of local level functionaries (political and administrative). In 2005-6, TRAI had recommended a liberal policy on community radio stations so as to make it relatively easy and inexpensive for non-profit organisations to set up such local radio stations. Unfortunately, the policy did not make allowance for a small group of village youth/women etc to set up a low cost local station without forming/ registering a society. This needs another look, particularly in villages/ panchayats where no society exists or has come forward to set up such a station. The very strict policy relating to news radio also needs re-examination. The community radio policy and rules should explicitly mention that such radio stations have a right to disseminate any and all news (information) relating to execution of government projects and programs in the block/district. This is necessary to ensure that the general

estrictions on dissemination of news by private radio and TV stations is not used to stifle the dissemination of such information by community radio stations.[9]

4.1 Integrated Smart Card[10]

For programs and subsidies meant for individuals and households, the PAIS would have a third leg, an integrated smart card (ISC) system. The ISC system can convert the poor from supplicants who are sometimes treated worse than beggars to empowered citizens who can demand the approved/sanctioned/budgeted entitlements as a right.[11] On the other side those who are genuinely concerned about the poor will be able to identify exactly who is getting (or not getting), which of the slew of benefits that are currently given out by numerous departments at the Central and State government level.

The system will be built on the identification and issue of unique ID number to all residents. This requires a data base of identifiers (permanent) and the issue of a UIN to each resident.[12] Based on this Unique ID number and associated information all residents will be entitled to a smart card containing their unique identifiers and specified un-changeable data.[13] All residents with consumption/income below the median will be entitled to obtain this card below cost (BPL free), conditional on declaration of their income/ consumption (subject to verification by govt agencies). All those above the median income/consumption would have to pay the cost of this card but need not declare their income/consumption so as to make it easier to preserve confidentiality. Declaration of income/consumption would be required by any individual/ family/ household who want to claim an entitlement. That is, only those who have declared their income/consumption and had it entered on their card can claim any subsidy that is intended for the poor and less well off (subject to normal verification procedures).

The entitlements would be divided into three categories. Those only for BPL (conventional poverty line). Those above poverty line but having income below the median (APL50) and the rest

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[9] Even private radio networks that do not have a license for news dissemination should be allowed to disseminate information on programs and projects carried out by the government in the name of the people/poor. These will help in improving accountability and effectiveness of programs.

[10] Please see the Report of the 11th Plan Working Group on Integrated Smart Card System, titled, "Entitlement Reform For Empowering The Poor: The Integrated Smart Card (ISC) System," January 2007, for further details.

[11] Beggars generate income and any non-legal activity is a potential source of bribes, while in the case of subsidies and transfers any money given to the rightful beneficiary is that much less money for sharing .

[12] The issue of a number does not require a smart card or even a debit/credit card. The UID can be printed on a small piece of paper along with the name and mailed to the recipient. The UID data base will have additional information (date and place of birth, names of parents), that can be used to cross-check and do 1st stage filtering of duplicate IDs. Either physical checking or collection of photographic/ bio-metric information and corresponding software can constitute the 2nd stage filter for eliminating duplicate IDs. A jail term could be prescribed for fraudulent declaration for obtaining duplicate ID.

[13] Such as date and place of birth, mothers and fathers name (at birth), and given name (first).

of the residents. Though primary identification of BPL will be as difficult/ easy as it is today, the creation of a unique ID referenced data base accessible to different departments and agencies will allow progressive improvement in the quality of the relevant information, as the data base containing this information will be available to all departments and the public. If any other criteria are to be used for giving subsidies, for instance if the fertiliser subsidy is to be given only to small and marginal farmers, appropriate land related information (ownership/leasing in/leasing out) would have to be entered in the data base and the smart card.

The smart card would have memory partitioned into distinct modules representing different entitlement groups for which free services or implicit/explicit subsidies are given. These include Food & Nutrition, Energy (kerosene, LPG, electricity), education services, health services, civic amenities & services (drinking water, latrines/sanitation), employment (NREG), economic/farming (fertiliser, irrigation water, MSP). These separate modules could in principle be managed by the ministry/department under which the group falls. They would be responsible for setting up and maintaining the back-end financial and data base system that is vital to eliminating errors of omission and commission and improving delivery efficiency. These departments/ministries would control the entry of data into their own module of the smart card.

Any subsidy received by any individual would be entered on his/her smart card when the good or service is delivered/charged for by the authorised supplier (e.g. the FPS, kerosene/LPG dealer, fertiliser outlet). The rules and regulations for delivery of subsidy and its re-imbursement to the goods/service supplier would be defined by the concerned department. The data entered on the smart card should however, be accessible by all monitoring/ evaluation agencies so that they can put together a picture of what subsidies are being received by whom as well as those who are not receiving a subsidy for which they are eligible.

The integrated smart card system (consisting of front-middle-back end) is completely consistent with different models of delivery of subsidies and transfers. Thus the food subsidy could,

(a) Continue to be delivered through the existing Fair Price System in which food is delivered to them by FCI through State food departments,

(b) Be delivered through FPS plus other authorised food shops, or

(c) Delivered through any shop in the country that signs up and registers with the concerned department (with no FCI supply), or

(d) Be converted into a pure cash subsidy.

It will also allow other innovations/experiments such as the division of the PDS food entitlement between the Head of household and his/her (non-earning) spouse or transfer of entire household entitlement to the housewife/mother. Similarly different models can be used for Kerosene supply

and fertiliser supply to farmers. In other words the precise model for deliver of the subsidy or income transfer to individuals/ households can be decided separately and/or modified over time.

4.2 Classification of Beneficiaries

The NSS surveys are currently used to estimate State and National poverty rates. By their nature and design these surveys do not identify specific individuals/families/households below the poverty line. Central departments and/or States have their own guidelines for identifying BPL households. The actual data collection and identification is done by States, which have their own rules and procedures, and these can vary across States and their sector departments (eg. State food departments and State rural development departments). For instance the Rural Development department of the Central government has a set of guidelines for identifying the poor for the purpose of eligibility under the programs funded by it. These guidelines specify an exclusion criterion (all those above the consumption poverty line for the State) and 13 different indicators for identification of BPL households. The rural development departments of States carry out the actual rural census for collecting data on these variables, specifying the rules for creating a single index and specifying cut-off values for the overall index or indices. The degree of consistency and comparability of such data across States is indeterminate as the definition of parameters and the wording of questionnaires were done independently by each State.[14] Further the relationship of these parameters to the consumption criteria used in the NSS consumption surveys is un-known. Quantitative research is needed to select visible indicators of poverty and determine the weights to be used to aggregate these indicators into a one dimensional index that will most closely match the consumption criteria of personal/house hold well being.

The issue of a unique ID number to each resident will not magically solve these problems of consistency and comparability across different data sets. Nor will it do away with the basic need for verifying the information provided by each resident and for updating it regularly. The use of a Unique ID number for each individual surveyed and/or enumerated will, however, make it much easier to cross check and improve the quality of the data over time, once it is digitised.

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[14] Further each State delegates the process of identification to lower levels such as districts, blocks and Panchayats. It is not clear if a uniform cut-off level is specified/used for/at every level!

4.3 Web Enabled Public Information System

Beneficiaries can be empowered if they and their well wishers/representatives have information. The information must first be generated and organised into a digital data base. Finally it must be made accessible through the web and other means. The foundation of the system is the digital data base of beneficiaries and the benefits they have received.

The beneficiary data base has two components. A list of beneficiaries and their benefit related characteristics and information about the benefits received by them. The criteria used to identify and select/reject beneficiaries must be clearly defined and amenable to smooth implementation keeping in mind the capabilities of the implementing agency/department. These criteria have to be translated into specific indicators that are collected for each beneficiary. For instance the rural development department guidelines specify 13 indicators. These must be entered along with personal details needed to identify the beneficiary (name, address, UID of person or members of the household etc.). These must be entered into the digital data base in a form that can be accessed through the web. This data base must contain the names of rejected applicants along with those who have been selected, so that aggrieved potential beneficiaries can appeal their classification. The target should be to have information about indicators for (at least) the bottom 50% of the population so that all the poor are incorporated in the benefits system.

The second component of the digital data base is the period wise details (monthly, annual) of benefits received by each selected beneficiary. Thus for instance in the case of PDS food, information about the amount of food (rice, wheat, other grains) provided and the price at which it was provided must be entered. If possible information on the quality of this food should also be entered. For beneficiaries located in areas covered by the telecommunication system this could be done on a real time basis (T+1 or T+2), while for remote areas could be done on a monthly basis.

Both sub-components of the beneficiary data base must be accessible through the agency/department web site. Such a web enabled data base should be fully operational in every department / agency providing services to the Public at the local, State and Central, level by the end of the Plan.

5 OPERATIONAL PLANNING

5.1 Outcomes & Management

5.1.1 Capital Expenditure

Over the decades Plan projects and programs have come to be focussed excessively on spending of allocated expenditures rather than on their impact or outcomes. During the tenth plan an effort has been made to re-focus planned projects and programs on physical outputs and final outcomes. These outputs and outcomes have to be defined before finances are budgeted and detailed operational plan drawn up for physical implementation. These then provide the basis for continuous monitoring, periodic evaluation and achievement/ accountability. The approach has to be somewhat different for projects and programs.

5.1.1.1 Projects

Large projects: Each large project must have a detailed Program Evaluation Review Technique (PERT) and /or Critical Path Method (CPM) chart or programmed work program.[15] Land acquisition, which is often a critical bottleneck must be dealt with in the CPM based operational planning.

Small projects: Though detailed computer (program) based planning is not required for each and every small program, a complete enumeration/ listing is essential. This allows broad three stage monitoring (not started, in process and completed). These small projects can however be geographically aggregated (for instance by district) and their financial outlays and physical targets monitored (PERT/CPM).

5.1.1.2 Programs

Public & Quasi-Public G&S: In this case we should do a complete enumeration of financial and physical targets (e.g. Roads, canals, drinking water systems). Concurrent evaluation by independent monitors at State and Central/national levels should also be done.

Private goods for individuals (e.g. toilets, house sites). Detailed lists of individual beneficiaries and their location and program relevant characteristics must be produced before funds are transferred to the implementing agency. This allows regular monitoring of the physical achievements.

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[15] These and similar techniques were developed during WW II and widely applied in advanced countries during the post-war period. They seem to be still relatively rare in the Indian government / public sector.

5.1.2 Service Delivery: Subsidy Accounting

The treatment of subsidies must be made clear and transparent to every one, particularly the beneficiaries. This requires,

(a) Explicit calculation of cost of production and supply.

(b) A billing system that shows not just the price charged but the full price and implicit subsidy provided (separately).

The Inputs transferred from one government organisation to another, must also show clearly the cost price, the subsidy and the actual charge, to facilitate calculation of the cross tax-subsidy between government organisations.

Muster role and electronic record must be maintained of names and ID of each user of the service (receiver of subsidy).   This must be aggregated at the level of the service provide (teacher/health service doctor) and above to provide a quantitative performance record of government servants/service providers. The operational provider (class teacher, PHC nurse/doctor) could be issued a time card that records his/her attendance at school/hospital or a smart card that could record the provision of service to a user (entered on her smart card).

As soon as the smart card system becomes effective, smart cards would have modules for each government provided/subsidised service so that citizen is empowered to demand this service. The relevant module would be credited with the subsidy. The subsidy would be electronically transferred (credit) from the users smart card to the service provider's smart card if and when the service is actually provided (e.g. if the teacher and the student both come to class).

5.2 Time Horizon & Management Transfer

The time horizon of Plans is formally limited to the five year Plan Period unless there is a recognised spill over, such as a project or program that starts in the middle of one Plan and is expected to be completed in the next Plan.[16] Thereafter the projects and programs are transferred to the Central govt department or State govt and/or the operating units under their charge whose planning horizon is often limited to one year as per the normal annual budget cycle.[17] The transfer of Plan projects and programs from one management unit to another at the end of the Plan raises issue that need to be addressed to improve outcomes through more effective 'operational planning' and management.   The different management units may be within the same administrative

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[16] Programs, are however, often rolled over from one Plan to the next, sometimes with modified priorities and/or modified designations.

[17] This contrasts with private commercial organisation whose operational planning, based on staying in business indefinitely, who implicitly minimise long term costs of doing so. A few government commercial organisations and PSUs (e.g. NTPC) attain similar levels of efficiency, because they have the right incentive structure.

ministry/department (Department, departmental unit, PSU or Govt controlled non-profit society) or at different levels of government (Centre, State, Local Govt/PRI). In both cases there is also a budgetary transfer from the 'Plan' to the 'Non-Plan' head with a corresponding change in funding priorities, rules and procedures. Taken together this can result in serious mismatches in operational planning and management that undermine and occasionally nullify, the original goals that motivated the initiation of the project or program.

One example of this is the construction of a new speciality wing in an existing hospital, which is completed as per plan and becomes the responsibility of the hospital.[18] There have been cases in which whole or part of the wing has remained unutilised because no new professional/ technical/ managerial staff can be appointed with in the budgetary rules applicable to the hospital. There have also been cases in which the staff operating the old wing have been transferred to the new wing and the old one is no longer operated, while the new one is functional (but perhaps without the more skilled staff needed to effectively use the more sophisticated equipment). There have also been cases where new staff can and has been appointed, but not enough budgetary provision is available to purchase the inputs and raw materials to use the facilities at their peak effectiveness in supplying hospital services. And finally and almost universally there is inadequate funds budgeted for maintenance so the total stock of equipment declines rapidly despite the new addition, so that the quantity and quality of services supplied is barely maintained at old levels instead of increasing/improving significantly.

5.2.1 Maintenance of Assets

It is well known to anyone who has worked in government or analysed its budgeting that the easiest and first item to be cut in times of budget stringency is budgetary allocations for maintenance of machinery, equipment and other assets. The result is that in every non-commercial government organisation, machinery and equipment tends to deteriorate over time with consequential deterioration in the quality and the volume of service provided using this equipment. At the same time demands are routinely made to the Planning commission for plan funds for purchase of equipment, machinery and new construction. This compartmentalization negates the very concept of rational investment planning, which relates to the stream of services generated by investment, rather

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[18] Instead of a Hospital we could substitute University or any other service facility whose output is generally supplied free or at nominal cost that covers a fraction of operational cost. This may not apply to projects producing private goods and services (such as electricity) run by autonomous organizations eg. electricity company, some SEBs, which can charge at least some segments of users (such as industry) the full cost of the good or service (electricity).

than about new investment per se. The objective of planning has to be to maximise the stream of services that flow from assets.[19]

Effective operational Planning requires that requests for plan funds for construction and purchase of new machinery and equipment be *embedded in a broader operational plan* that fully accounts for future maintenance expenditures on existing and new equipment. The Planning Commission can make a start by insisting that such medium term operational plans,[20] showing future budgetary transfers and/or user charges, be drawn up and presented to it, before new Plan investment (for purchase of machinery and equipment) is formally approved. Any funds required for maintenance of assets being constructed as part of the plan are part of the plan allocation. The 11th Plan could also provide funds for maintenance of existing machinery and equipment as an incentive for preparing long term operational plans (by the receiving nodal department/ operational unit) that include adequate provision for maintenance expenditures.

5.2.2 Plan to Non-Plan

In most Central sector projects and programs the nodal department and/or the operational unit remains unchanged when the Plan scheme is completed. The only change is in the funding source; the fund requirements for running the project or program is transferred from the Plan budget to the non-Plan budget. Very often this is associated with a shortening of the time horizon from the five year Plan perspective to the annual 12 month budget perspective. Given the 12 month time horizon, there is no operational plan in existence with concerned departments, which projects overall financial outlays/requirements with future plan and non-plan fund availability and integrates them on a medium-long term basis. As the services generated by the project or program are commonly non-commercial,[21] there is no increase or at best a less than commensurate increase, in the revenues from the new service. The result is often a sharp (un-planned) increase in non-plan fund requirement.[22] This can result in un-planned cut-backs in existing programs (thus curtailing volume and quality of services delivered from them) and/or underutilisation of newly created facilities because of lack of staff or material inputs.

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[19] Capital stock K(t) is the sum of new investment [I(t)] minus the depreciation in existing capital stock K(t-1) i.e. $K(t) = I(t) - \delta K(t-1)$ where δ is the rate of depreciation of capital stock. In the absence of normal repair and maintenance the rate of depreciation can rise rapidly so that part or whole of the new investment is offset by depreciation in existing stock. Operational Planning has to focus on the total capital stock K(t) and must therefore be equally concerned with depreciation rate and maintenance.

[20] As against the annual plans that are the staple of the budget process.

[21] As market borrowing has been freed from government control, public commercial organizations that are not dependent on budgetary subsidies are now free to make their own decisions and are thus not part of the Planning for government expenditure.

[22] Or alternatively the continuation of a completed plan scheme beyond its originally intended time frame and/or objective.

One potential solution is identical to that for the maintenance problem. The formal approval for Plan programs and projects must be preceded by the presentation of a wider medium term operational plan for the relevant department / agency /unit in which the Plan schemes are embedded to achieve the overall aim of that dept/agency/unit. The operational plan must include medium term projections for staff requirements, material and maintenance requirements including those arising from planned investment. Similarly plan and non-planning funding sources must be integrated into this budget on a medium term basis. This will help reduce the extreme cases of wastage that arise from the distortion of incentive to keep starting new Plan programs and projects because these are funded by a separate Plan budget, not constrained by existing (non-Plan) budget allocations.[23]

Paper exercises, in which each department and its subordinate units make operational plans along these lines, will not be enough. There will have to be a procedure for aggregating these new operational plans to ensure that projected aggregate, total (plan + non-plan) expenditures are consistent with projected revenues.[24] Sustained and comprehensive improvement can only take place if,

(a) There is a single Ministry of Planning and Budget that integrates annual (non-plan) budget allocations and medium term plans and corresponding allocations (centralised solution),[25] or

(b) The incentive structure is overhauled (decentralised solution). This is considered in greater detail below.

5.2.3 Centre to State

In the case of CSS schemes there is an additional complication, particularly in sectors/ sub-sectors that are in the States list or in the Joint list but as a matter of practice have historically been exclusively carried out by the States. As the motivation for these schemes is an identified National deficiency in economic or social development, they are framed by the Centre and implemented through the States. Each State has its own perspective on the sector/sub-sector for which the scheme is framed based on its history, institutions and administrative machinery and political experience. It is inevitable that National guidelines cannot take account of every variation in every State of the Union. As long as the scheme is CSS scheme it can be kept relatively isolated from the existing rules regulations and procedures relating to the that sub-sector in each State. However at the end of the

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[23] Note good intentions will not be enough to achieve this outcome. The Planning commission, including its advisors must be able at some point to not approve the relevant portion of the Plan if the operational plan has not been produced or it is not satisfactory.

[24] This bottom-up approach would replace the existing top-down approach in which each department is allowed a standard increase of x% in its non-plan budget and x is adjusted to be in tune with revenue projections and FRBM targets. It is therefore unlikely to happen merely though exhortation.

[25] At the Center and in each State. In my judgment this is unlikely to happen as it will ruffle too many feathers.

Plan when the scheme is transferred to the State it must be integrated into the existing institutional arrangements for all activities in the sector/sub-sector. This can mean a significant adjustment if not dislocation.

This has several implications. (1) It magnifies the problem of transferring the scheme from the Central and State Plan budgets to the State non-plan budget. (2) To the extent the CSS funds represent additional funds for the State it distorts their incentive structure. There is a strong incentive (particularly in better performing States) to adapt or disguise existing State programs and show them as a new programs eligible for funding under the Centrally Sponsored Scheme(CSS) and to use as much of the funds provided under it, for existing State schemes.

To address these problems the CSS scheme guidelines must be framed keeping in view the need for their transition and integration into the existing programs of the State set up at the end of the Plan.

5.2.4 Incentive Compatibility

What has been termed 'Operational Planning" in a Government Planning context is a routine and un-noticed function of commercial organisations – no commercial organisation of the size of any government non-profit service organisations would survive without it. The key difference is that a commercial organisation cannot survive without revenue and the consumer/buyer will not pay unless a service is provided at a satisfactory level.[26] Thus service delivery is the primary focus of the commercial organisation. The second focus is of course the minimisation of delivery cost. The challenge for the government is to create an incentive structure that mimics that of the commercial organisation without giving up the non-profit character of the service providing organisation, such as a school or primary health centre.

The solution lies in linking budget transfers with service delivery. The first and most fundamental requirement is to measure and records every service delivered by the government organisation. The second is to devise a transparent formula that translates the amount and quality (to the extent feasible) of service provided, into a budgetry allocation that is available to the organisation as a matter of right. The third element is to give complete autonomy to the head of the organisation to spend this budget allocation for anything that in the organisation's will increase the volume quantity of services provided and/or minimise the unit cost of this provision or raise its quality at least additional cost.

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[26] The benchmark quality and price normally depends on the degree of competition.

If recording transactions is the sole responsibility of the service provider it is not very difficult to fill in the register at the end of each day to show that a lot of users have been provided a non-existent service. Thus a cross-check must be built into the system. The best cross-check is to empower the citizen user for who the service is intended. This can be done by issuing each of these entitled users with a smart card or debit/credit card. The user would then present the card to the service provider when she wants to obtain the service and the provider would use it in an appropriate machine to record the service provided.[27] These records would be periodically (e.g. monthly/weekly) sent to the supervisory authority through which the budget funds are provided. The authority would have software systems for cross-checking users, aggregating them and calculating the resultant budgetary transfer. These transfers could then be made with the same periodicity.

6 CONCLUSION

Better and more effective Planning of government expenditures has many elements. Some of the elements of planning that need improvement have been discussed in this note. These include clearer definition of program outputs and outcomes and detailed operational plans for achieving these goals. With the availability of new technology, government management information systems and public accountability can be vastly improved. The paper proposes a Public accountability information system (PAIS), with a web enabled public information system and a smart card recording all the benefits that the poor are entitled to receive through government programs. This would empower the poor, particularly in rural and remote areas, by converting entitlements into a financial right – a virtual credit/debit card based on government funds. If implemented sincerely, with inevitable modifications and adaptations arising out of implementation experience, this can help improve the efficiency and effectiveness of government expenditure over the next five years.

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[27] In the case of schooling the card would have to be presented every day to obtain the same level service checking. If this is impractical another system such as camera recording may have to be used to record the hours of teaching provided.

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Table 1: Public and Quasi-Public Goods and Services

		Government and Public Sector								Non-profit	Profit Making	
		Administration					Regulators	Companies	Public-Pvt	Societies	Co-operative	Commercial
		Policy	Planning	Finance or Subsidise	Supply	Produce	(professional)	PSUs	Partnership	(NGO)		
I	Public Goods & Services:	Primary & Major Responsibility of Govt										
1	Defence#					A+						
2	Courts					A+	JudicialCom					
3	Police				Autonomy	Police Com		@				
4	Roads											
4.1	Central Highways		Center	Partial				NHA	A			Const/maint
4.2	State Roads		State		A	B		SHA	B			Const/maint
4.3	Local,Conecting		State			A+						Const/maint
5	Public Education											
5.1	Preventive Health	A+	A	A+		A			Yes	Yes		
	(nutrition,cleanliness)											
5.2	Scientific approach	A+	A	A+		A			Yes	Yes		
	(supertition)											
5.3	Agri/crop(Extension)		Yes			A			Yes			e chaupal
6	Disease Control											
6.1	Communicable/Vector		A+			A+						
6.2	Epedemic/Environment		A+			A+						
7	Population Control	A			A+							
8	Town & Village											
8.1	Water Drains	A	A+		Run	Set up			Rural	Rural	Rural Mgt	Manage
8.2	Sewers,treatment	A	A+		Run	Set up			Rural	Rural	Rural Mgt	Manage
8.3	Solid Waste disp	A	A+		Run	Set up			Rural	Rural	Rural Mgt	Manage
9	Irrigation											
9.1	Aquifer Mgmt	A	A				yes					
9.2	Drainage systems	A	A		State	Local			Yes	Yes	Yes	
II	Quasi-Public G&S:	Government Responsible for Correcting Externality										
	(prod externalities)											
1	Defence Equipment					Major Sys			HiTech Eqp			Genrl Equip
2	Irrigation											
2.1	Dams	Yes	Yes			A						Construction
2.2	Canal arteries	Yes	Yes	Yes	A				Maintain			Construction
2.3	Distribution canals		Yes	Yes	A				Maintain		Farmers	Construction
3	Rural											
3.1	Elect Transmission		Yes	Yes	Yes		A+	Yes	Yes			Yes
3.2	Elect Distribution		Yes	Yes	Yes		A+	Yes	Yes	Yes	Yes	Yes
3.3	Telephony,Internet			No Tax;USO				OpenAccess				Competition
3.4	Postal network			Yes				India Post	SupplyChain			Front end
4	Water-drinkable		Yes	Yes	Yes	Rural		Urban	Yes			Urban Mgt
5	Education											
5.1	Schooling*	A	A	A	UrbPoor	Rural	A+:InfoAsym		Yes	Yes		Yes
6	UrbanMassTransit*	Yes	Yes	Yes				Subway	Busses			Busses
III	Private Goods & Services:	Regulate Non-Government Agents, Promote competition										
1	Health											
1.1	Insurance*			Grants	Poor		Info Asym	Compete	Yes	Poor	Rural	All
1.2	Services*			Grants	Urb poor	Rural	Info Asym		Poor	Poor	Rural	All
1.3	Hospitals			Poor			Info Asym	Yes	Yes	Yes		Yes
2	Education											
2.1	Technical		B				Certification		Institutes			Yes
2.2	Higher*			Grants	Centr/stat		Rating		Yes	Yes		Yes
2.3	Professional*			Grants	Centr/stat		Rating		Yes	Yes		Yes
3	Electricity											
3.1	Production			Un convn			B	B	Un convn	Un convn	Un convn	Competition
3.2	Transmission					Eliminate	A+	Yes	Yes			Benchmark
3.3	Distribution					-Theft	A+	All	Yes			-competition
4	Ports	Yes	B				Yes	Yes	Yes			"
5	Airports	Yes	B				Yes	Yes	Yes			"
6	Railway											
7.1	Rail line & Signals		B	Strategic			Yes	Open Access	Yes			Local lines
7.2	Trains/service							Yes				Competition
8	Telecom: Urban						Yes					Competition
9	Pipeline:Gas/Oil		B					Open Acess				Open Acess
	Notes: The importance of the governments role in the subject is represented by the grade (A, B)											
	# = Defence Equipment is a public good monopsony; * = Social/Merit arguments for subsidy(in addition)											
	@ = The T&D mafia in SEBs and the Coal mafia in Bihar are examples of failure to protect public property (family jewels?).											