ANALYTICAL REVIEW OF THE PSDP PORTFOLIO

"Public Sector Development Program (PSDP)"

Planning Commission
Planning & Development Division
Government of Pakistan
(Public Investment Programming Section)

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EXECUTIVE SUMMARY

This report analyzes the current portfolio of investments in the Public Sector Development Program (PSDP) costing Rs 4.1 trillion with a view to identify issues hindering its effective implementation. PSDP contributes towards economic development of Pakistan. Therefore, emphasis has been given on its rationalization in light of its increasing throw-forward of over Rs 3.0 trillion of approved projects in backdrop of fiscal constraints. The most critical issues are listed below:

- What is the consequence of 18th Amendment and 7th NFC Award on federal PSDP?
- How to address Rs 3.0 trillion throw-forward?
- Can PSDP finance mega infrastructure projects, like Basha Dam?
- Cost / Time overruns of projects occur due to consecutive cuts in PSDP
- Backlog of approved projects has been increasing. (Approving forums continue to approve projects without considering fiscal implications.)
- Project cash flows and benefits are vague and if discounted at higher risk adjusted rate (at 35% instead of 12%) then most PSDP projects become unviable.

It is ripe time to review and rationalize the PSDP portfolio so that limited fiscal resources are leveraged towards viable projects of energy, water, transport and other infrastructure sectors, being the primary responsibility of the federal Government. Projects which have positive impact on the economy and society and offer the greatest rates of returns should be financed with priority. To address the above issues, few recommendations are suggested below:

- Approve fewer projects. Specifically, consider an embargo on approval of projects by DDWP / CDWP and ECNEC except where there is critical need and donors' assistance is agreed and committed.
- Projects that are already part of PSDP ought to be reviewed for deferment until the fiscal space improves.
- Provincial projects should not be financed from federal PSDP.
- To reduce throw-forward liability, potential projects may be transferred to private sector with Public-Private Partnership (PPP), or Built to Operate & Transfer (BOT), or Built to Operate & Own (BOO), particularly Diamer-Basha Dam.
- Discourage brick and mortar projects.
- Assurance of full release of PSDP budget without cuts.
- Carefully re-estimate cash flows and benefits and re-compute NPV for the projects.

With our population increasing at 2 percent annually, there is tremendous stress on our resources. The Government does not have the fiscal space for spending on public services given its immense obligations to provide defense, law and order, and servicing the outstanding public debt. In order to move the growth agenda forward, many projects must be privatized or implemented via Public-Private-Partnership (PPP) mode.

1. Introduction

1.1. Objective of the PSDP is to execute approved projects, which provide essential services for public welfare but need huge capital investment, and have long gestation periods and financial rates of returns lower than what private investors would demand. These projects generally are roads, highways, power generation, education facilities, and health and community services. Even when financial returns are low, projects are undertaken by the Government due to political, social and economic pressures.

1.2 Under Schedule II of the Rules of Business 1973, formulation of PSDP is one of the main functions of the Planning & Development Division. It is an integral part of public investment, which includes development expenditures made by the Federal Government through PSDP and Provincial Governments through their respective Annual Development Programs (ADPs). Public Sector Enterprises (PSEs) of federal, provincial and local governments also undertake various development projects / programs under their ADPs. A project/program refers to an investment that will produce benefits over an extended period of time – perhaps 30 years.

1.3 PSDP/ADPs (Federal/Provincial) are the main tools for implementing public sector economic plans. For this purpose, development funds are mobilized for delivery of improved public services and amenities.

2. Review of Public Investment under PSDP (2005-10)

2.1. During the MTDF period 2005-10, against projected outlays, development allocations and actual expenditures (deflated to 2010 prices) were as shown below:

Table 1: Annual Phasing and Utilization of PSDP (2005-10)

(Rs Billion)

Fiscal Year	Federal		Provincial		National		%-age Achieved
	MTDF Target	Utilization	MTDF Target	Utilization	MTDF Target	Utilization	
2005-06	185	175	62	94	247	269	108
2006-07	197	207	71	114	268	321	119
2007-08	199	171	76	115	275	286	104
2008-09	207	127	78	128	285	255	89
2009-10	237	143	88	119	325	262	81
Total	**1,025**	**823**	**375**	**570**	**1,400**	**1,393**	**100**

Figure 1a: Annual Phasing & Utilization of PSDP (2005-10) (National)

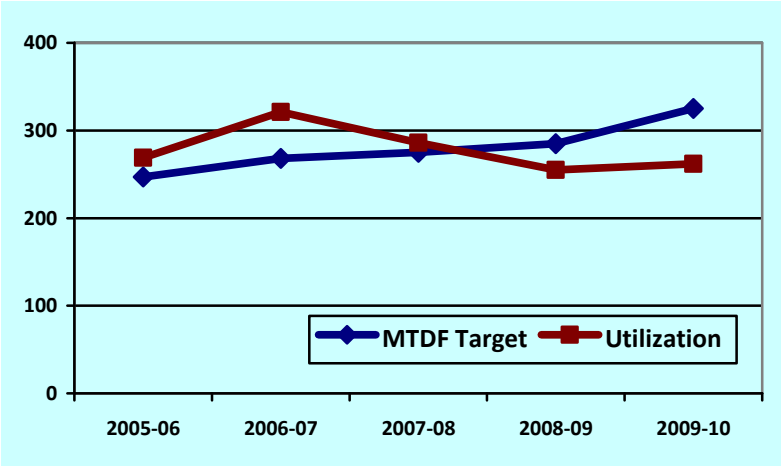


Figure 1b: Annual Phasing and Utilization of PSDP (2005-10) (Federal)

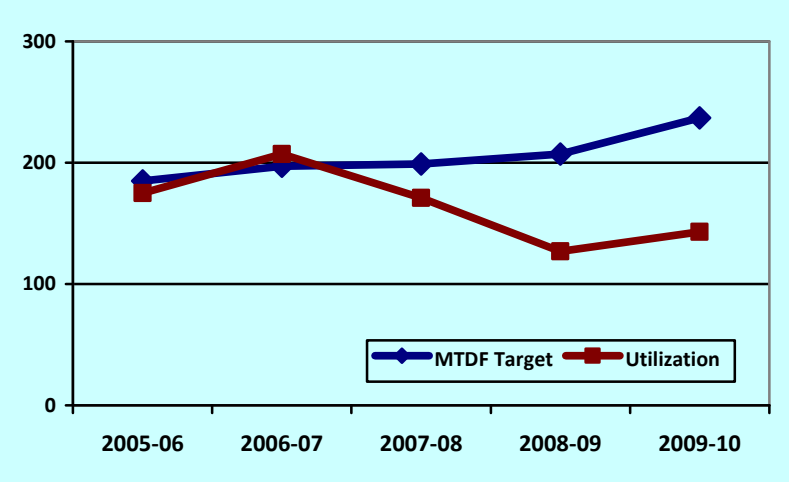
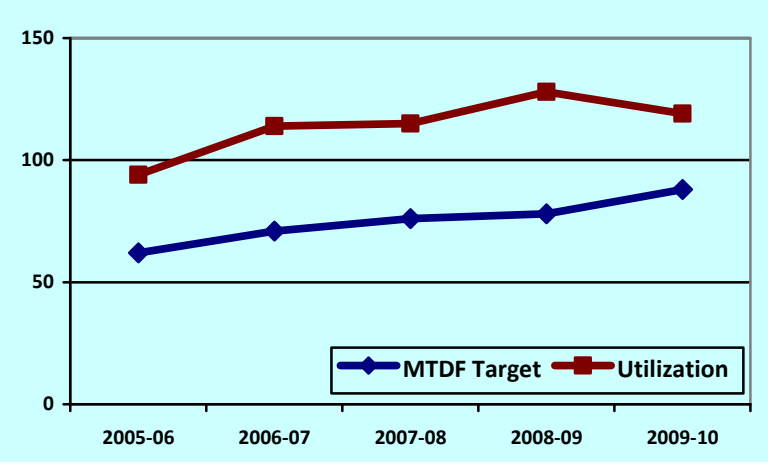


Figure 1b: Annual Phasing and Utilization of PSDP (2005-10) (Provincial)



Major Outcomes

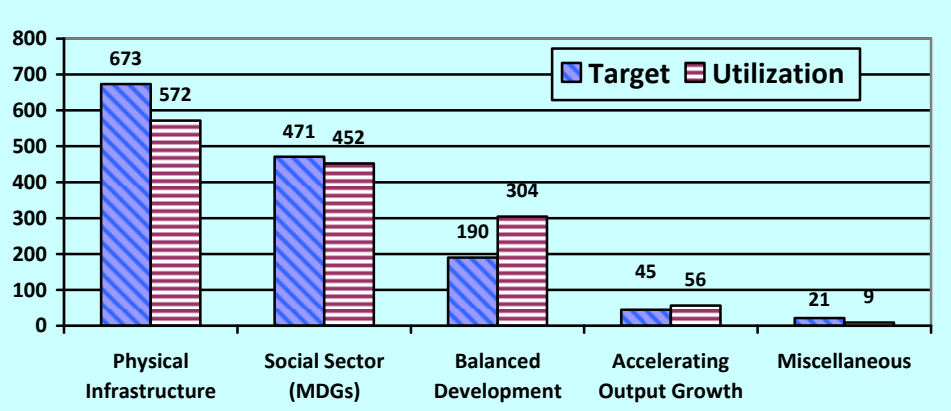
- For 2005-10, projected National MTDF outlay of Rs 1400B was almost fully realized with actual development expenditure of Rs 1393B.
- At federal level, there was a shortfall of Rs 202B—actual expenditure stood at Rs 823 billion against the projected amount of Rs 1025B.
- Provinces incurred expenditure of Rs 570B against the projection of Rs 375B, through ADPs, which mostly offset the federal shortfall of Rs 202B
- Shortfall at the federal level occurred during last two years of MTDF 2005-10, mainly due to rising expenditures on national security and enormous subsidies to public sector enterprises, which have been incurring gigantic losses.
- Sectoral targets were not achieved in the Infrastructure sector due to smaller investment than expected by donors in the energy sector during the plan period.
- Investments in Social sectors received top priority by the provinces, bolstered by the federal government by financing national vertical programmes in health education and other sub-sectors.
- To remove regional disparities, Rs 304B was actually invested against the projected amount of Rs 190B in balanced development sector by undertaking special programmes and packages.

Table 2: Sectoral Review of PSDP (National)

(Rs Billion)

Sector	Target	Utilization	% Achieved
Physical Infrastructure	673	572	85
Social Sector (MDGs)	471	452	96
Balanced Development	190	304	160
Accelerating Output Growth	45	56	125
Miscellaneous	21	9	41
Total	**1,400**	**1,393**	**100**

Figure 2: Sectoral Review of PSDP (National)



3. New Procedure of PSDP Formulation

3.1 PSDP was formulated to maximize the total benefit of limited public funds while keeping in view financial constraints. From fiscal year 2010-11, budgeting procedure has been restructured under the Medium Term Budgetary Framework (MTBF) with a focus on "results, performance and output based budgeting system". Under MTBF, the federal budget has been framed for medium term of three years. A working group has been established to meet quarterly and determine resource availability. Accordingly, current as well as development budgets are estimated for three years as "Indicative Budget Ceilings (IBC)". Advance indication of resources should help to plan economic activities to achieve growth targets.

3.2. Under restructured procedure, Principal Accounting Officers of Ministries / Divisions have been empowered across the Federal Government to enhance efficiency and effectiveness of government spending.

3.3. The following strategy was adopted while allocating funds under PSDP 2010-11:

- Projects nearing completion (over 50% expenditure incurred) were fully protected.
- Accommodate donor funded projects to honor international obligations.
- Development of less developed areas on priority.
- Slow moving /new projects were deferred.
- New projects with low NPVs or low IRRs were strongly discouraged
- Brick and mortar projects discouraged
- Token allocation made for important un-approved projects

3.4. The new PSDP procedure also tries to revive and stabilize the economy and conform to the Nine-Point Economic Agenda of the present government. A sustainable equation must be developed for resource allocation between provinces and the federation, under 7th NFC award and 18th Amendment. PSDP will provide a collaborative environment to involve the private sector. PSDP tries to catalyze economic activities through efficient utilization of funds, by sectoral priorities, to improve the living standards of people.

4. Sectoral Analysis of PSDP Portfolio (2010-11)

4.1 PSDP projects were divided into the four main sectors: Infrastructure (energy, road, rail, port etc); Social (education, health, population, etc.); Balanced Development (special areas and special programs for less developed areas); and Production (Agriculture, Industry and Commerce and Minerals).

4.2. Before dissecting the PSDP portfolio based on sectoral costs, let review at the Infrastructure and Social sector projects that the PSDP is funding.

4.3. **Infrastructure comes in two types: *enabling* and *supporting* type**

i) **Enabling Infrastructure** facilitates and creates an enabling environment to perform the functions necessary for the economy to meet growth and development objectives. These include: roads, bridges, airports, railways, seaports, irrigation systems, oil & gas supply lines, telecommunications, power supply, etc. Storage and warehousing facilities may also be considered as parts of this type of infrastructure.

ii) **Supporting infrastructure** relates to the soft infrastructure that helps society and the hard infrastructure to function smoothly, synergistically and efficiently. This category of infrastructure can include institutional structures and setups like security, hospitals, law enforcement and justice, libraries, parks, etc.

iii) 18th amendment desires the hard ***enabling infrastructure*** to be federal responsibilities, while basic education, irrigation, hospitals, fire protection, parks, recreational facilities, water supply, sewerage, and other such infrastructure to be provincial responsibilities.

iv) Supporting infrastructure may be jointly handled by federal and provincial authorities. Seaport and airport management may also be jointly administered with the decision on cost and revenue sharing basis.

v) Large infrastructure projects (power / energy, oil & petroleum, and roads) may require donor or foreign assistance in coordination with federal agencies like the Economic Affairs Division. However, provincial authorities may contact the foreign offices and donors if their assistance or participation is required for provincial projects. Participation of foreign government / donors is not limited to feasibility level only. Their participation may now also be focused on investment and participation on actual physical execution and implementation of the already completed feasibility studies.

vi) Federally funded PSDP projects (infrastructure, commercial, social and others sectors) are monitored through the Projects Wing of the P&D (Planning & Development) Division. These projects are also evaluated for their impact through the same setup. In the case of Baluchistan, a special setup under the Inspector General Development Projects Baluchistan is also operational under the Member Implementation & Monitoring (I&M) at the Planning Commission. Projects that are specifically federal PSDP related will continue to be monitored and evaluated through the same setup. In case of projects that are related to federal and provincial domains, the setup like IGDP Baluchistan may be encouraged.

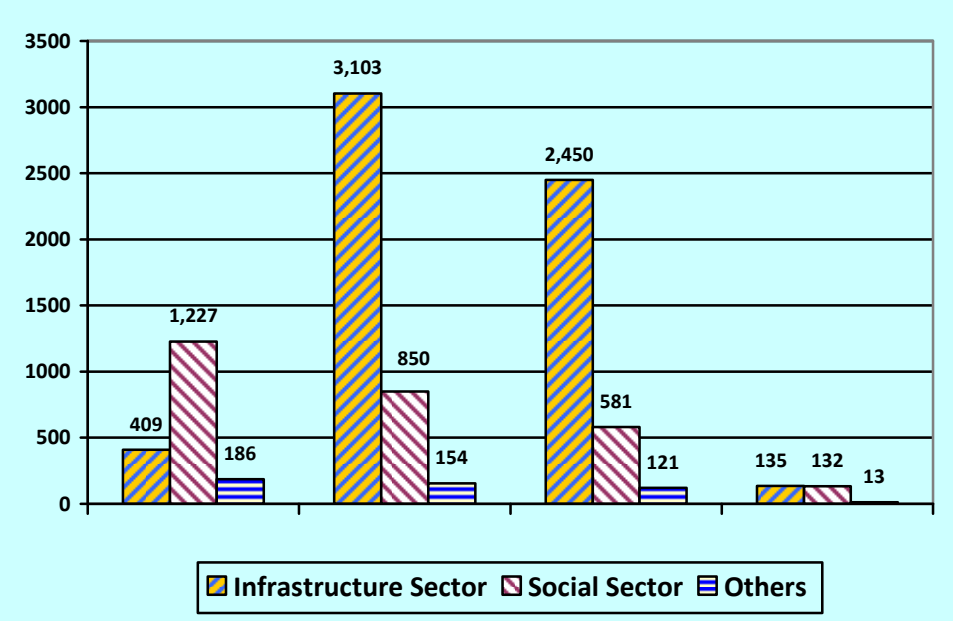
4.4 The current federal PSDP was approved by the National Economic Council in its meeting held on 28th May, 2010 at Rs 280B including foreign aid component of Rs 38B. Sectoral Distribution is as shown in the table, below:

Table 3: Sectoral Distribution of PSDP

(Rs Billion)

Sector	No. of Projects	Cost	Throw-forward (1-07-2010)	Allocation
Infrastructure Sector	409	3,103	2,450	135
Social Sector	1,227	850	581	132
Others	186	154	121	13
Total	**1,822**	**4,107**	**3,152**	**280**

Figure 3: Sectoral Distribution of PSDP



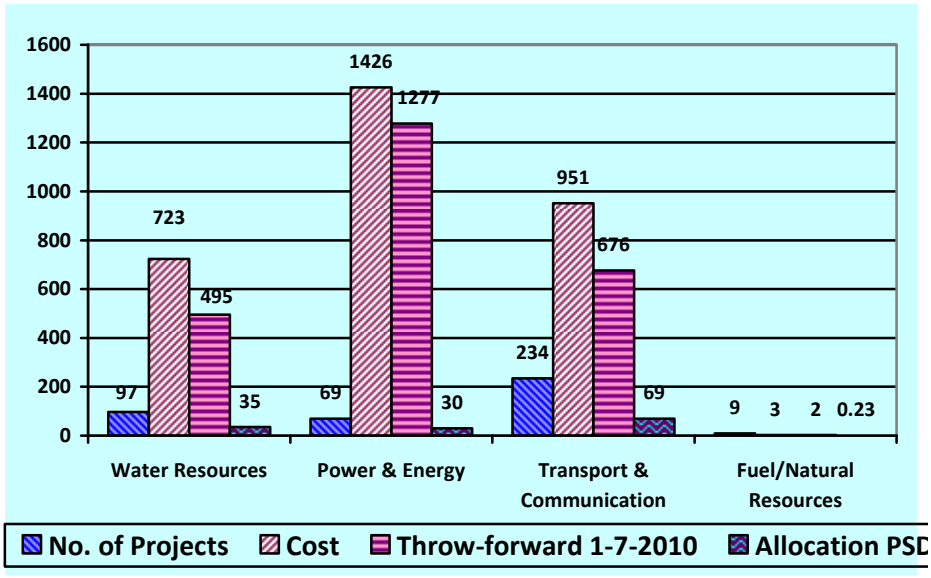
Infrastructure Sector

Table 4: Infrastructure Sector Profile

(Rs Billion)

Sector/Sub-Sector	No. of projects	Cost	Throw-forward (1-07-2010)	Allocation PSDP 2010-11
Water Resources	97	723	495	35
Power & Energy	69	1426	1277	30
Transport & Communication	234	951	676	69
Fuel/Natural Resources	9	3	2	0.23
Total (Infrastructure)	**409**	**3,103**	**2,450**	**134**

Figure 4: Infrastructure Sector Profile



4.5. The above table reveals that 409 projects out of 1822 are part of Infrastructure sector costing Rs 3.1T (76% of overall cost of Rs 4.1T). Throw-forward of Rs 2.45T for these projects is ***mainly*** due to the four largest ones—namely, Bhasha Diamer Dam, Chashma Nuclear Power Project (C3) & Chashma Nuclear Power Project (C-4) and Neelum-Jehlum Power. Government's resources for energy sector as per Indicative Budget Ceilings—i.e., Rs 63B and Rs 86B for FY 2011-12 & 2012-13, respectively, are not sufficient to finance these projects. According to Friend's of Democratic Pakistan (FODP)'s Energy Sector Task Force Report (ESTFR) of 13th July 2010, a sum of USD 7.7B (Rs 662B) investment in the next three years is critically needed to generate additional capacity of 6790 MW to overcome the energy deficit in Pakistan. Towards this end, commitment of the Government to help facilitate both public and private foreign investment in the energy sector for fast tracking is urgent.

4.6. The Financial Internal Rate of Return (FIRR) & Economic Internal Rate of Return (EIRR) of public sector Infrastructure projects (capital-intensive) are normally discounted at the international standard rate of 12% at the ***pre-implementation*** stage and further considered if the Benefit Cost Ratio (BCR) exceeds one. But these projects turn into net liabilities due to lack of proper planning and capacity vis-à-vis availability of resources. Take the case of Mangla Dam Raising Project aiming to raise its height by 40 ft (2.9 maf) with additional annual capacity of power generation of 644 GWh. The project required six years to complete (2003—2009). An important aspect of resettlement was ignored when planning mega projects, like the Mangla Dam Raising project. The project completed on time but due to the resettlement issue, cost of the project increased by almost two times and it is still not in operation. Due to cost revision, EIRR of the project has been revised down from 20% to 18%. Resettlement and compensation issues should be carefully addressed at the beginning of project execution. Due to resettlement issues, WAPDA could not impound water during the last three rainy seasons and our economy was not able to reap benefits worth at least Rs 40B. Like-wise, C-3, C-4, Motorways & Road projects, small dams, etc. are also facing identical issues vis-à-vis adequate resources availability which may take years to complete.

4.7. Infrastructure helps to meet demands like energy, water, transportation, etc. Apart from that it generates demand for more raw materials which in return makes more income for businesses and generates job opportunities. Infrastructure development also improves local conditions for foreign investment into other areas like industry and trade. Timely innovative financing of mega Infrastructure projects, especially in energy sector will help to fill widening gaps in this area on one hand and ease out burden on public sector expenditure on other hand.

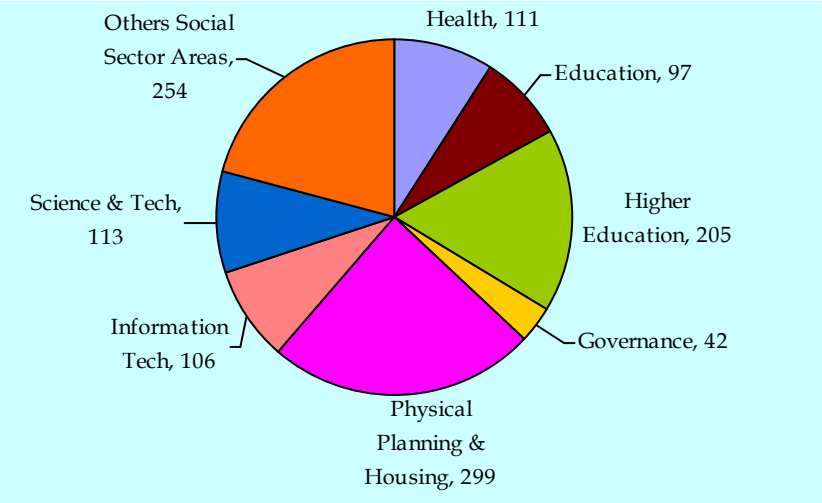
Social Sector

Table 5: Social Sector Profile

(Rs Billion)

Sector/Sub-Sector	No. of projects	Cost	Throw-forward (1-07-2010)	Allocation 2010–11
Health	111	190	159	19
Education	97	49	33	6
Higher Education	205	150	94	16
Governance	42	87	48	5
Physical Planning & Housing	299	95	61	13
Information Tech	106	73	49	5
Science & Tech	113	22	15	2
Others Social Sector Areas	254	156	122	68
Total (Social Sector)	**1,227**	**822**	**581**	**134**

Figure 5a: Social Sector Profile (Rs Billion)



4.8. Social sector projects are meant to improve the living standard by delivering basic health, education, sanitation, and clean water supply facilities. The sector is responsible for producing the desired level of skilled manpower coupled with innovations as input to the booming industry and service sectors of the economy. Social sector projects raise the Human Development Index (HDI) to meet the MGD targets. PSDP contains 1227 projects in the social sector, costing Rs 82.2B (21% of the total

portfolio of Rs 4.1T). These projects are normally low cost, labor intensive and short gestation having low EIRR & FIRR compared to the Infrastructure projects.

4.9. Our economy is dependent not only on natural resources but also in this age of knowledge, progress must be bolstered by human capital capable of producing and applying new knowledge through innovations.

3.7. The Higher Education Commission (HEC) is facilitating higher education institutions to work as engine of growth for socio-economic development of Pakistan. Its portfolio consisting 205 projects costing Rs 150B is undertaken under PSDP to develop academic and research infrastructure, access to information and allied facilities to teachers and students. Main components of its portfolio are as under.

- Scholarships & HRD component Rs 59B
- Development of Physical Infrastructure Rs 40B
- Equipments/Laboratories etc. Rs 16B
- Administrative/Salary component Rs 22B
- Misc (consultancy, contingency, interest, etc.) Rs 13B

4.10. Over the last several decades, the industrial economy based on manufacturing has shifted to a service based economy driven by entrepreneurship, technical skills, know-how and innovations. Pakistan must move towards a knowledge based economy to exploit new opportunities presented by the vast access to knowledge and globalization. Around the world, nations are investing in higher education but like all social reforms, return on investment in academia has a long and lagged response.

4.11. Often inclusion of un-viable projects (those requiring large outlays or having low returns) in HEC's portfolio is based on irrational decisions rather than on technical and demand driven basis. Erecting physical structures like housing colonies for faculty, rest houses, university buildings rather than improving education and research standards, will not realize the development agenda. HEC should review its portfolio and rationalize it by giving priority to investment in those projects aiming at creation of trained human capital, rather than erecting physical infrastructure.

4.12. Similarly, Health is an important sub-sector. Portfolio of 111 projects costing about Rs 160B needs a critical review to asses if this sector meets the health care requirements. The portfolio has the following components of Rs 190B:

- Administrative/Salary component Rs 72B
- Equipments/Laboratories etc Rs 43B
- Development of Physical Infrastructure Rs 35B
- Misc (consultancy, duties, contingency, interest etc.) Rs 23B
- Vehicles and Utilities Rs 17B

Under the PSDP, mainly vertical projects related to health are being implemented by provinces with major component involving administrative cost of Rs 72B (salary and stipends to contractual employees), followed by equipment and accessories expenses of Rs 43B. A major challenge is how to minimize this cost. It is also imperative to assess PSDP in broader policy perspective instead of standalone projects. Improvement in health care services, integration of primary health care services, avoiding duplication

and overlapping shall reduce cost. Paying attention to maintenance of existing structures and procuring equipment is much needed rather than spending on erecting new hospital buildings. Full utilization of available infrastructure facilities must be emphasized and required. There are success stories of public private partnerships in malaria, T.B, HIV/AIDS and other programmes like Basic Health Units. There is need to build on such success stories which would share cost and bring improved service delivery and ensure accountability.

4.13. Provinces have been constitutionally empowered with abolition of Legislative Concurrent list (47 subjects in the Concurrent Legislative List) under 18th Amendment to the Constitution 1973. To this effect, 18 federal Ministries/Divisions are to be devolved to the provinces. Most social sector projects will be the responsibility of the provinces for funding. Devolution of these Ministries/Divisions to provinces along with their projects/programs will reduce the burden of throw-forward from the PSDP by about 10%. However, the federal government may support provincial governments where they lack technical expertise in order to help achieve the development targets under MDGs, etc.

4.14. As a policy of the government to remove regional disparities, the federal Government will continue to invest by intervention in backward areas of the country including FATA, Gilgit-Baltistan, AJK and Balochistan under special programs in order to bring these areas at par with the developed areas of the country.

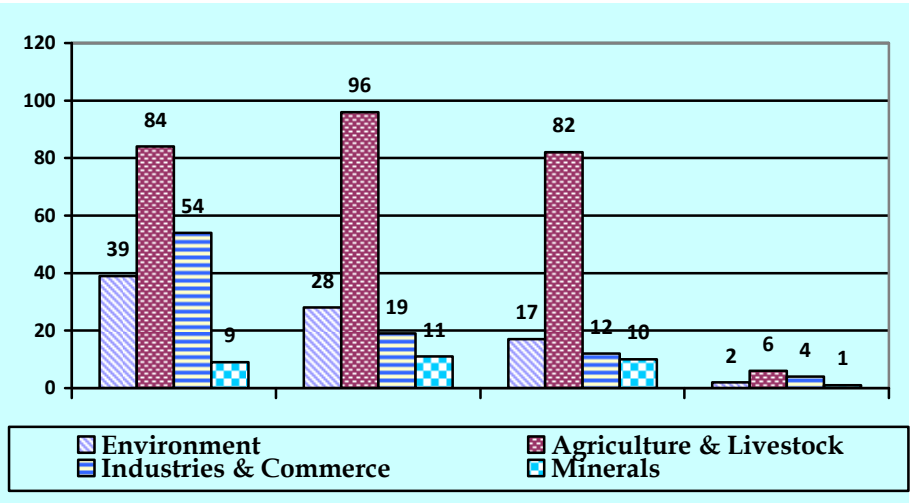
Other Sectors

Table 6: Profile of Other Sectors

(Rs Billion)

Sector/Sub-Sector	No. of projects	Cost	Throw-forward (1-07-2010)	Allocation 2010–11
Environment	39	28	17	2
Agriculture & Livestock	84	96	82	6
Industries & Commerce	54	19	12	4
Minerals	9	11	10	1
Total (Others)	**186**	**154**	**121**	**13**

Figure 6: Profile of Other Sectors (Rs Billion)



4.15. Agriculture is still a prominent economic activity in Pakistan with about 45% of the population associated with this sector. Pakistan has the largest canal system but by not adopting new and efficient management practices and failing to incorporate the latest technology into irrigation system has resulted in poor growth of crops as compared with international standards. To better utilize arable land to become self-sufficient in food, and to promote dairy development and businesses, 84 projects worth Rs 96B have been undertaken by the Agriculture & Livestock sector. To promote entrepreneurship in local industry and creation of employment for skilled manpower, the federal Government has introduced various initiatives in the **industry** sector. To achieve envisaged targets of exports, steps to establish ROZs and EPZs in Balochistan and KPK have been taken under the PSDP.

5. PSDP Portfolio Needs Effective Rationalization

5.1 There is an urgent need to rationalize federal government's investment portfolio with a view to complete high impact on-going projects which have greater economic and financial benefits to the society of sectors like energy, water and transport, etc. within time and approved cost. Ministries/Divisions have also been advised to prioritize scarce resources to enhance productivity and bring positive meaningful change to the economy in the shortest possible time. The throw-forward has almost doubled during a period of five years (Rs 1.7T in 2005–06). There are multiple reasons for accumulation of large throw-forward under the PSDP—some are listed below:

- Approval of many provincial projects without due consideration.
- Frequent reductions in PSDPs as a result of fiscal constraints.
- Lack of proper fiscal impact assessment of projects at approval stage.
- Upward revisions of project costs due to delays caused by paucity of funds.
- Not funding infrastructure projects with Public-Private Partnership (PPP) or on Built to Operate & Transfer (BOT) or Built to Operate & Own (BOO) basis.

5.2. To consolidate and prioritize the development portfolio to make it more manageable and implementable, an effective policy and mechanism in consultation with all stakeholders may be developed. Towards this end, efforts were initiated by the Planning Commission to rationalize PSDP portfolio during 2008-09 with a view to reduce it by 20%. This was required to qualify for the Poverty Reduction Support Credit-I, by the World Bank. Following criteria were adopted while prioritizing on-going/approved projects:

- Projects of high priority were fully protected
- Projects which could be delayed for 1–2 years were deferred
- Projects which could be dropped from the PSDP
- Projects which could be shifted on Public Private Partnership (PPP) mode

5.3. As a result, 140 out of 1865 projects were either deferred or transferred for consideration for PPP, which reduced the throw-forward by Rs 380B (approximately 13%). The immediate outcome of this exercise was acknowledged and appreciated but soon after the deferred projects were forced back into the PSDP and those proposed for PPP could not be fully implemented. A similar exercise was conducted during 2010-11 as directed by the National Economic Council. Over 1000 projects were classified into different categories on the basis of expenditure incurred, but the recommendations could not be enforced.

6. Cost Component Analysis of PSDP (2010-11)

6.1. Effort has been made to disintegrate the cost of PSDP (at 2010 prices) into its various cost/investment components so as to ascertain the trend and percentage of development expenditure incurred under PSDP. Current portfolio of projects costing over Rs 4.0T has been separated by sub-cost components in the table, below.

Table 7: Cost Components

(Rs Billion)

Main Cost Component			Delivery Cost				Total
Land & Resettle	Civil Works	Machinery Equipment	Salary & Admin	Vehicles	Utilities	Contingency & Misc	
220	2350	558	268	17.5	22	582.5	4018
5.5%	58%	14%	7.2%	0.4%	0.5%	14%	100%
78%			**22%**				**100%**

Figure 7a: Main Cost Component

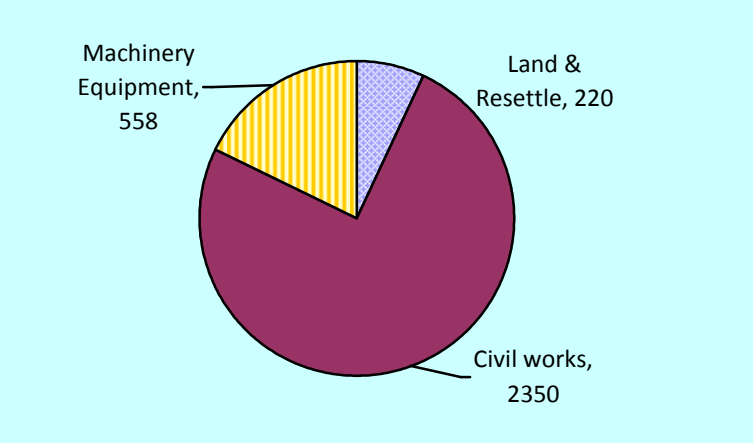
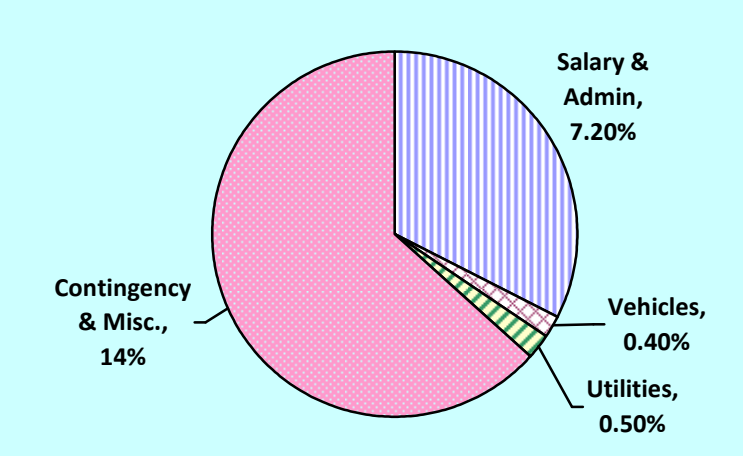


Figure 7b: Delivery Cost



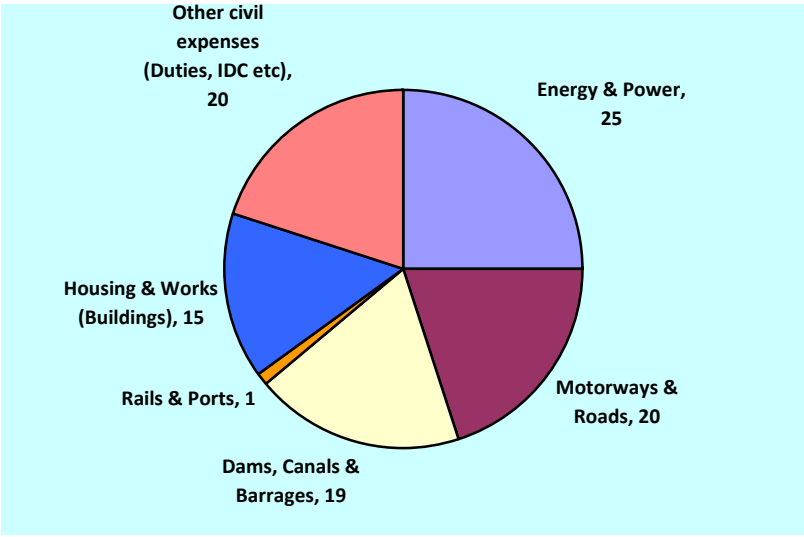
6.2. Table 7 reveals that civil works and allied expenses cover 58% of the total cost, followed by procurement and replacement of machinery and equipment covering 14%. Civil works; land acquisition and resettlement costs; and capital expenditure on machinery and equipment, in total, cover 78% of the total portfolio investments. Delivery cost contributes another 22%, mainly for administrative and salary (7%), contingencies and miscellaneous (14%), which include Human Resource Development (HRD) expenses.

6.3. The civil works and allied expenses (Rs 2,350B) include the following:

Table 8: Civil Works Projects

Civil Works Projects	Cost (Rs Bn)	Share (%)
Energy & Power	591	25
Motorways & Roads	471	20
Dams, Canals & Barrages	442	19
Rails & Ports	20	1
Housing & Works (Buildings)	365	15
Other civil expenses (Duties, IDC etc)	462	20
Total	**2,350**	**100**

Figure 8: Shares of Different Civil Works Projects (in %)



6.4 The above table shows that the share of physical housing and buildings (brick and mortar) is 15% of Civil Works (Rs 365B) and 9% of total portfolio investment. Projects for energy / power; water conservation and augmentation; rail, ports & motorways are the life blood of the economy but due to financial constraints these projects, too, need a critical review to shift some of them on PPP mode. By doing so, we can reduce the fiscal burden and achieve some macroeconomic stability. The challenge is to create public private partnership for development projects that have significant positive impact on economic growth.

7. Economic & Financial Appraisal[1] of Development Projects

7.1. Economic and Financial appraisals of development projects is undertaken in order to choose those projects for financing under PSDP which have positive impact on productivity and GDP. Financial Appraisals focus on cash flows–out flows and inflows whereas Economic Appraisals also take into account social benefits evaluated at shadow prices. Risk and sensitivity analysis is also undertaken to assess the sources and magnitudes of risks so that mitigation measures are suggested against such projects.

7.2. A Project can be examined from the following perspectives[2]:

- Technical
- Institutional – Organization – Managerial
- Social
- Commercial Aspect
- Financial Aspect
- Economic Aspect
- Environmental Aspect

7.3. For situation analysis, sixteen projects of Infrastructure and Production sectors costing each over Rs 2B, approved during the last five years, have been randomly selected to conduct the Cost Benefit analysis. The total cost of the projects is Rs 310B, with a cumulative NPV of Rs 88B. Since these results relate to *pre-Implementation* phase, thus only the subsequent "*Evaluation*" of these projects can identify their actual impact and constraints, which impeded achievement of the envisaged objectives. These results are summarized in the following tables.

Table 9: Sector-Wise Financial & Economic Analysis of 16 Sample Projects

(Rs Billion)

Sector	No. of Projects	Total Cost	NPV	Av. EIRR/FIRR (%)
Agriculture	2	114	56.5*	13.8(EIRR)
Water	6	126	6.9*	13.6(EIRR)
Communications	2	9	-0.45*	12.2(EIRR)
Industry & Commerce	4	44	27.9@	17.4(FIRR)
Energy	2	17	-2.9@	9.5(FIRR)
Overall	**16**	**310**	**88.013**	**13.95**

*Economic @Financial

[1] Project Appraisal is a feasibility analysis of anticipated costs and benefits of possible new investment and an evaluation of desirability of committing resources. See Annex 1 & 3.

[2] For details and descriptions, see Annex-2

7.4. **Financial analysis** of the 6 projects given in table 9, in Industry, Commerce and Energy, shows that against the investment of Rs 61B, the cumulative Net Present Value (NPV) is about Rs 25B and the *weighted average* Financial Internal Rate of Return (FIRR) is 14.8%. Similarly, **Economic analysis** of 10 projects, in Agriculture, Water and Communications, at the pre-implementation (approval) stage, show a total investment of about Rs. 249B, with a cumulative NPV of about Rs 63B and a *weighted average* Economic Internal Rate of Return (EIRR) of about 13.7%.

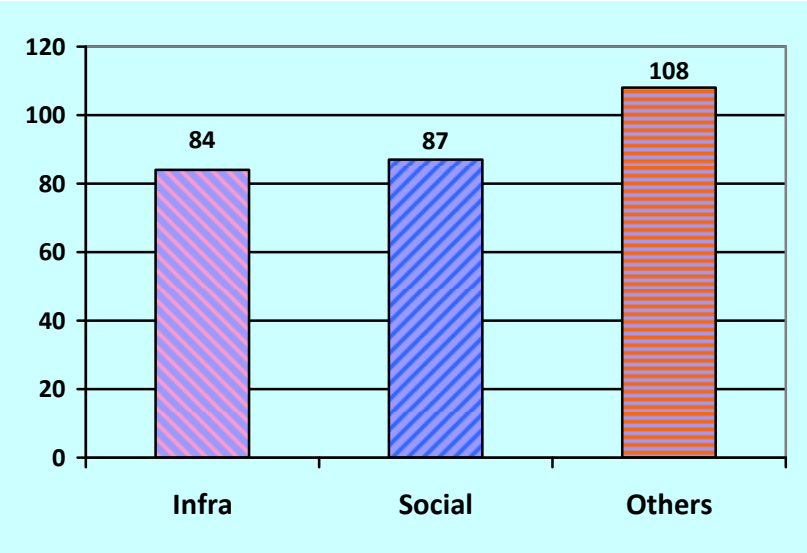
8. Reasons for Low Impact on Productivity & GDP

8.1. The *weighted average* FIRR/EIRR is 13.95% in the case of above 16 projects (which exceeds the international standard of 12%). During July—December, 2010, about 279 projects were monitored by the Projects Wing, of the Planning Commission, and it discovered the following problems, bottlenecks or reasons for delay in implementation resulting in low impact on productivity and GDP growth:

Table 10: Sectoral Distribution of Problems that Caused Cost Overruns

	Major Problem	Infra	Social	Others	Total	% share
01	**Delay in release of funds**	23	22	67	112	40
02	**Lack of Capacity**	8	23	32	63	23
03	**Delay in Civil Works**	13	13	4	30	11
04	**Delay in appointment of PDs/ Consultants**	0	3	0	3	1
05	**Delay in Land Acquisition**	4	3	2	9	3
06	**Concept and Design Problem**	6	1	0	7	3
07	**Delay in Consultant's Appointments**	2	0	0	2	1
08	**Delay in Procurement**	4	1	0	5	2
09	**Law & Order Situation**	7	2	0	9	3
10	**Turn Over of Project Directors/Staff**	1	0	0	1	0
11	**Lack of Coord. b/w Fed & Prov. Govts.**	4	1	0	5	2
12	**Other**	12	14	3	29	10
13	**Projects having no major issue/problem**	0	4	0	4	1
	Total	**84**	**87**	**108**	**279**	**100**

Figure 10: Total Sectoral Distribution of Problems that Caused Cost Overruns



8.2. Delay in release of funds as per commitments is the most frequent reason for implementation delay, causing cost overruns. PSDP has faced consecutive cuts on development allocations from FY 2008-09, which has forced the funds releasing agency to stop or holdback releases which cause cost and time overruns. Moreover, projects which started with positive EIRR / FIRR often end up with negative returns when funds are not released as per the phased activities in PC-I. In addition, project management is part of the overall mis-management and involved in corrupt practices.

9. Reduction in PSDP 2010-11 and its effects

9.1 Size of the PSDP portfolio keeps increasing as new projects get approved because the level of financing required for project approval keeps decreasing. Against the NEC approved size of Rs 280B, as indicated in para 3.1 above, the PSDP budget has been slashed by Rs 100B. As a result, 83 projects which were supposed to complete by June 2011 may not complete now. Similarly, other projects, especially Infrastructure related, face a reduction of over 50% in their original allocations, which will delay their completion. The situation further has been aggravated by allocations to provincial projects. Rs 33B have been allocated during the current financial year. This amount could be diverted to infrastructure projects for their completion provided provincial governments take on such projects by financing them from their own resources but the provincial governments have shown reluctance to do so. It is expected that these projects will shift to the provinces, after the 18th Constitutional Amendment is fully implemented.

9.2. Following indicate specific impact on projects/programmes:

- Allocations to important projects of NHA in KPK, Southern Punjab and Rural Sindh have been slashed from Rs 27B to Rs 11. B (57% reduction).

- Priority projects of Water resources like small/medium dams, Canals, RBOD projects have been adversely affected. Only Rs 8B will be available for them against a commitment of Rs 18B. Rs 6B are required for Mangla Dam Raising Project.
- No amount is left for down-payment to meet international obligations for C-3, C-4 projects of Pakistan Atomic Energy Commission (PAEC) which has jeopardize the contract between the Chinese contractor (CZEC) and EXIM Bank.
- To implement Supreme Court's decision, Rs 9B is required for Lady Health Workers. Against this amount, Rs 5.8B has been released and the balance of Rs 3.2B is difficult to ensure.
- An amount of Rs 3.7B will be required to pay only salaries of the employees under Population Welfare Program.
- Education sector will also be affected. Projects like *Education for All* and *Teachers Trainings* will be affected. Rs 1.2B are required to protect these projects.
- Foreign Aid of Rs 31.6B will also be affected. Only Rs 9.6B will be disbursed, against the commitment of Rs 31.6B.

9.3. Thus reduction in PSDP 2010—11 has adversely impacted the overall economy by further prolonging economic recession due to delay in meeting energy and water shortages, impeding employment generation, delay in achieving MDGs, resulting cost and time overruns of projects, hindering poverty reduction measures and reinforcing boom-bust cyclical behavior in the economy.

Conclusion

10.1. PSDP has lost its effectiveness for playing its due role for economic development. A rational policy is needed for financing projects under the PSDP. Currently PSDP has become over-burdened with number of local nature schemes financed on priority which have rather low impact on economic development such as local roads, schools, colleges, health units, water supply and sewerage projects have made inroads into federal PSDP at the cost of strategic national projects. On other hand, present fiscal reality is unsustainable to plan even in the short term. Rising demand for security on account of war on terror, flood re-construction works, loss making public corporate sector and subsidies compelled the government to borrow for running its day to day affairs.

10.2. PSDP bears the brunt of expenditure cuts in the public sector. It is treated as scapegoat for heavy cuts on development expenditure as a result of fiscal reality. This always results in a heavy price that has to be paid in time and cost over-runs of ongoing projects and in delayed benefits. PSDP 2010-11 was approved at a reduced size of Rs 280B. About 83 projects were planned to complete, if allocations had not reduced during the current fiscal year. PSDP size has again been revised downward by Rs 100B, which has pushed these projects another two or more years to complete.

10.3. PSDP is supposed to work as a multiplier of investment to generate economic benefits. For smooth economic development, PSDP portfolio (Rs 4T) must be reviewed in consultation with all stakeholders for effective rationalization and consolidation vis-à-vis fiscal impact assessment. For productive outcome under PSDP investment, priorities may be shifted from financing local nature projects of provinces/district to national level projects having visible economic impact. To control looming energy crisis, substantial resources are needed to inject into this sector to realize targets set under various sectors of the economy say agriculture, manufacturing and services. Programmes and initiatives may be introduced for bringing innovations, technological know-how, encourage entrepreneurships, regularize business and modernize cities as engines of economic growth.

10.4. PSDP carries over Rs 3T throw-forward which requires an average of Rs 600B annually to be financed over the next five years. Attention has been focused on the mega projects of the infrastructure sector which are nearing completion (or substantial expenditure has been incurred on such projects). To improve core social indicators, allocation to the social sector projects - i.e., HEC, Health, Education, Population, Social Welfare are required. Most of social sector projects will be devolved to the provinces. Public sector enterprises – such as WAPDA, NHA, Railways, etc. will be encouraged to implement their projects on innovative financing modes like Public Private Partnership (PPP), Built to Operate & Transfer (BOT) and Built to Operate & Own basis.

10.5. The overall objective of PSDP is to achieve sustainable economic growth so as to improve living standards of common people. Towards this end, a close collaboration with provinces and private sector will be needed to efficiently utilize public funds as per sectoral priorities so that the objectives and aims set for various programs, i.e. MDGs, Nine-Point Economic Agenda, etc. are realized.

References

1. Government of Pakistan, Planning Commission "Public Sector Development Program 2010-11"

2. Government of Pakistan, FODP's Energy Sector Task Force Report (ESTFR)

Annex 1: PSDP APPROVAL PROCESS

i. The process starts in December of every year when the PIP Section of the Planning Commission seeks from the Federal Ministries / Organizations / Provincial Governments the details and priorities of the projects (whether ongoing or new) to be funded from PSDP. The details are received in the concerned technical sections and Programming Investment section (PIP) of the Planning Commission, who determine and make recommendations on the priorities and allocations of the projects.

ii. Based on the received information, working paper is prepared by the PIP section in consultation with concerned technical sections of the Planning Commission for the "Priorities Committee" meeting to be held in the Finance Division, under the chairmanship of Additional Secretary (Budget). The Priorities Committee issues a schedule of consultative meetings (Feb. to May) with the concerned Federal Ministries/Organizations/Provincial Governments (represented at the level of Joint/Additional Secretaries/Chairman Corporations) to determine the priorities of the projects and prepares in consultation with the PIP section of the Planning Commission and Ministries/ Organizations/Provincial Governments the working paper for Annual Plan Coordination Committee (APCC) reflecting prioritized allocations in light of the available size of the development envelope.

iii. The APCC is headed by the Deputy Chairman Planning Commission where the projects and their allocations are finalized in consultation with the same Ministries represented at the level of Ministers/Secretaries/Chief Secretaries. The final set of project allocations is prepared for the approval of National Economic Council (NEC) which is headed by the Prime Minister and attended by Senior Federal & Provincial Ministers and Secretaries of the concerned Ministries.

iv. The meeting of NEC is normally held in the last week of May or first week of June of that year. After the approval of NEC all the allocations are published/printed in shape of a book for circulation to all concerned.

v. Any review in the PSDP during the current financial year which includes cross-sectoral re-appropriations is sent to the NEC for approval in the middle of the financial year (Dec/Jan).

Planning Commission (PC) proformae

There are five Planning Commission (PC) proformae in the project approval cycle details of which are given as below:

PC-I: This proforma envisages complete project details such as project description, purpose, objectives, cost, design, completion time, annual recurring expenditure, management structure, environmental impacts, technical, financial and economic feasibility and the rate of return (FIRR or EIRR), benefits, justifications, etc.

PC-II: This proforma envisages details with regard to survey and pre-feasibility & feasibility study before approving the project.

PC-III: Once the project is approved from the relevant competent forum its implementation is started by the Sponsoring/Executing Agency. In order to judge the progress of the project as per the objectives set out in the PC-I, the Planning Commission monitors the project, quarterly, during its implementation phase. The PC-III contains a questionnaire seeking information on the progress of the project such as physical and financial targets of the next quarter and achievements of previous quarter. It also addresses the issues during implementation stage.

PC-IV: This is a proforma filled by the Sponsoring/Executing Agency at the time of completion of a project and sent to the Planning Commission for approval and onward transmission to the Finance Division for shifting the project from implementation stage/development budget to the operational stage/non-development/recurring budget.

PC-V: Once the project gets into the operational stage after completion its performance is judged in light of the given financial/economic feasibility, benefits and objectives of the project as were set out in the PC-I. This proforma has a questionnaire seeking information on annual performance of the project.

Individual Project Approval Process

Following are the fora for approval of PC-I/II

Approval Forum	Approval Power (Million)	Composition
DDWP	Rs. 60	Headed by Secretary of concerned Ministry with reps. of Planning and Finance Divisions as Members
CDWP	Rs. 1000	Headed by DCPC with Secretary P&D, Members of the Planning Commission, ACS (Dev.) of Provinces, reps of Finance, EAD, and concerned Ministries as Members
ECNEC	Above Rs. 1000	Headed by Prime Minister with representation from Provinces and concerned Ministries as Members
Corporation-DWP	ECNEC Powers	Headed by Chairman of the Public Sector corporation with reps of Planning & Finance as Members

Appraisal

- The sponsors send 45 copies of the PC-I/II to the Planning Commission. The document is first appraised by the PIA Section which is the secretariat for the above forums and if cleared by them it is circulated to all Members of the DDWP/CDWP/ECNEC and the concerned technical section of the Planning Commission dealing with the subject.

- The concerned technical section carries out the technical appraisal while the Economic Appraisal Section conducts the financial/economic viability of the project including IFRR, IERR, NPV and sensitivity analysis etc.
- The technical section is the principal section to whom all the appraisal is sent and who prepares a working paper for CDWP including brief project description, technical comments and its financial/economic appraisal.
- The PIA Section circulates the working paper to all the members of the CDWP who while attending the meeting comment, appraise and support the project. The CDWP meeting after detailed deliberations may or may not approve the project keeping in view the national/public interest.
- If it is agreed to approve a project which is beyond Rs. 1000 million, the CDWP recommends it to the ECNEC for final approval. If the CDWP does not agree with the project justification it may return it to the sponsors with advice to abandon the project or revise according to the requirements as deliberated in the CDWP.
- After the recommendations of CDWP, a summary for ECNEC is prepared by the concerned technical section of the Planning Commission, 120 copies of which are sent to the Committee Wing of the Cabinet Division who circulate the summaries to all the members of the ECNEC.
- The ECNEC normally holds its meetings on quarterly basis however depending on the number of projects on its agenda it may hold its meeting earlier or later.
- In case a project has to be started in urgency and the CDWP has already recommended it for approval but the meeting of ECNEC is not scheduled in near future, the sponsors through Planning Commission can move a request of anticipatory approval of Chairman ECNEC stating the justification, importance and urgency of the project. In such a case the approval of Chairman ECNEC can be granted to the extent of the allocation available for the project in the PSDP of that financial year.

Approval

Once the project is approved from the relevant forum, after receipt of minutes and other necessary documents the PIA Section issues administrative approval of the project to the sponsors for taking up the case of financial releases with the Finance Division who make quarterly releases only if an allocation of that project is available in the PSDP. The sponsors are also required to prepare annual cash/work plan of the project for getting the releases.

Monitoring

The Projects Wing of the Planning Commission is responsible for undertaking the quarterly monitoring of the projects which have been started by their sponsors and have attained 30% progress. The monitoring proforma are sent to the sponsors for providing the progress. Once the filled up proforma are received in the Projects Wing it conducts the physical as well as desk monitoring encompassing the project's physical and financial targets and achievements.

Annex 2: EVALUATING PROJECTS FROM VARIOUS ASPECTS

Technical aspects

Technical analysis concerns the project's inputs (supplies) and outputs (production) of real goods and services. Project framework must be defined clearly enough to permit technical analysis to be thorough and precise. Analysis must take into account marketing of products and services, storage facilities required and the processing systems that will be needed for successful operation of the project.

Institutional-organizational-managerial aspects

A range of issues in project preparation revolves around overlapping institutional, organizational and managerial aspects of projects. Projects must properly relate to the institutional structure of the country and region. Organization proposals should be examined to see that the project is manageable; organization structure is transparent; authority and responsibility are properly linked; organizational design encourages delegation of authority and where people report to the project director. The proposed organization must properly take into account the customs and procedures required by law. Proposals must include provisions for managers and supervisors to obtain up-to-date information on the progress of the project

In considering the technical, managerial and administrative aspects of project design, not only must we be concerned that technical, managerial and administrative problems will eventually be overcome, but that a realistic assessment is made of how fast they will be resolved. This important because the value of the benefits of an investment are sensitive to delays in project implementation.

Social aspects

The analysis may consider the social patterns and practices of the clientele a project will serve. Project analysts must carefully examine the broader social implications of proposed investment – for example, whether the project is responsive to national objectives of creating employment opportunities and income distribution. For social and political reasons, the government wants to emphasize growth and development in particular regions. The project analysts must consider the adverse effects a project may have on particular groups, in particular regions. For example, in some areas the introduction of mechanical equipment or of cash crops has deprived women of work they need to support their children. Considerations concerning the quality of life should be part of project design. A project may well include provisions for improved health services, better water supplies, or increased educational opportunities for the youth.

Commercial aspects

Commercial aspects of a project include arrangements for marketing the output produced by the project and arrangements for the supply of inputs needed to build and operate the project.

On the output side, careful analysis of the proposed market for the project's production is essential to ensure that there will be an effective demand at the unsubsidized market

price. Where will the products be sold at what price? Will the project still be financially viable at the new anticipated price? What share of the total market will be the proposed project supply? Are there suitable facilities for handling (storage of) the new production? Is the product for domestic consumption or for export? Will the project produce the quality that the market demands? What financing arrangements will be necessary to produce and market the output, and what special provisions will be needed for the project to finance marketing expenses? Will the output need subsidy or some protection?

Do market channels for inputs exist, and do they have enough capacity to supply new inputs on time? How will the suppliers of inputs be paid? Are new channels needed for the sales and marketing of the output of goods and services delivered by the project?

Financial aspects

Financial aspects of project preparation and analysis encompass the financial effects of a proposed project on each of its various participants. In agricultural projects the participants include farmers, private sector firms, public corporation, project agencies, and perhaps the national treasury – the fiscal space.

Economic aspects

Economic aspects of project preparation and analysis require a determination of the likelihood that the project will contribute significantly to the development of the economy and that its contribution will be great enough to justify using scarce resources it will need.

Environmental aspect

Environmental aspect must also be examined. Those who enjoy the fruits of economic development today may be making future generations worse off by degrading the environment. For sustainable development, current generations should meet their needs without compromising the ability of future generations to do the same.

When environmental damage leads to losses in productivity, common remedy requires valuation of anticipated damages. In applying this approach, the physical and ecological relationship between environmental damage and its impact on output or health is estimated and combined with prices to derive monetary values. For environmentally related health risks, income foregone because of illness or premature death can be used to measure welfare losses. However, such losses are only partial because they rely solely on income losses.

Annex 3: PROJECT ANALYSIS & APPRAISALS

There are different ways to present the summary results for making investment decisions. **NPV** (which is the **Discounted Cash flow Analysis**) **and IRR (Internal Rate of Return) are the two** most widely used and appropriate ways for analyzing **projects attractiveness by ranking based on these two criteria.**

The first step in project appraisal is to identify all the costs and benefits of the project. There are many ways to group costs, but a common way is to distinguish between capital cost and operating costs which are further broken down to show local and foreign exchange components.

Similarly the benefits, which are in terms of incremental output and services, are identified as a difference of "with" and "without" the project. In view of financial, economic and social implication of the project, all of which are equally important, the decision whether a project should be implemented must take into account financial, economic and social indicators.

For the purpose of financial analysis, costs and benefits are measured at market prices and the decision to invest is made on the basis of financial profitability of a project: it is accepted if the present value of the sum of cash inflows exceeds the present value of the sum of cash outflows of the project. Financial analysis, however, has the following limitations:

- Often there are externalities relating to an investment activity, which do not enter into financial analysis but have social impact.
- Inputs and outputs are often valued at market prices, which do not reflect the full economic impact. For example, some impacts might be on the rate of inflation, exchange rate, wage rate, unemployment, quotas, tariffs, etc.
- A society may pursue investments for which commercial profitability is not a relevant criterion.

While commercial profitability, as a criterion for investment decisions, is relevant for a private enterprise, it generally fails to allocate the resources in the interest of society-at-large. Economic analyses take into account the shortcomings of financial analyses. For the purpose of economic analyses, following adjustments are made to the financial analyses.

- Include externalities
- Use shadow-prices, instead of market prices, which reflect the scarcity of inputs and outputs of an investment
- Integrating the project with the national objectives

Limitations of Project Appraisal

The project appraisal methodology has a number of shortcomings which should be kept in view while using it as a decision-making tool. Some of these limitations are listed below:

- Quality of analysis depends on anticipated costs and benefits. Over-estimation of benefits and underestimation of costs is common in order to get the project approved. The uncertainty in costs and benefits can be overcome by conducting rigorous sensitivity analysis and examining project attractiveness against different sources of uncertainties.
- In most cases it is assumed that projects will not impact the macro variables, as a result the analyses do not give a complete picture of the project. Where externalities (e.g. job creation, regional development, development of skill, transfer of technology) are substantial, project analysis becomes less formal.
- It is a useful device where benefits can be quantified. Projects related to health, education, rural development, etc., where the benefits cannot be quantified, cost-benefit analysis has little to offer except for choosing projects with the least cost.
- Project analysis is useful when there is a definite starting and finishing points. It cannot be used for ongoing public services.
- There are other ways for resource allocation—such as price, tariff, exchange rate and interest rate policies.
- Project evaluation based on financial analysis is often in conflict with political and social analyses.