



NATIONAL QUALITY POLICY AND PLAN

**Pakistan National Accreditation Council
(PNAC)
Ministry of Science and Technology
(MoST)
Government of Pakistan**

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Section 1

FOREWORD

Realizing that a comprehensive quality policy is needed to address the emerging global requirements of trade, environment, health and safety of the consumers, Pakistan National Accreditation Council (PNAC) under the administrative control of the Ministry of Science & Technology (MoST) initiated work on the formulation of a National Quality Policy & Plan (NQP&P) in October, 2000.

A Steering Committee under the Chairmanship of Secretary MoST was constituted to oversee the formulation of NQP&P. A Working Group comprising members both from public and private sector was also constituted under the chairmanship of Mr. Tariq Mustafa, Ex-Federal Secretary to support the Steering Committee. With the support of ADB, foreign and local consultants were engaged to assist in the formulation of the policy. Study visits to some developed and developing countries were made and relevant policy documents were examined. PNAC provided secretarial support to the Steering Committee and coordinated all relevant activities of the policy formulation.

Initially a draft discussion paper on the subject was circulated among the stakeholders for their views and comments. Later a draft policy was prepared in the light of suggestions received and was presented to the then Minister for the Ministry of Science & Technology Prof. Atta-ur-Rehman, who directed that the policy be accompanied by a comprehensive working plan specifying cost and timeframe for implementation. Relevant agencies were again invited to submit proposals for inclusion in the working plan. The draft National Quality Policy & Plan was then prepared and placed on the website of MoST for further comments and views of the stakeholders. Based on the inputs received from consultants, experts and relevant public and private sector organizations, the draft was revised many times by PNAC under the guidance of the Steering Committee and the Working Group. In Feb 2004 the Steering Committee finally endorsed submission of the draft NQP & P to the Cabinet for approval.

The effective implementation of NQP&P is expected to improve the competitiveness of both public and private sector organizations and contribute towards export enhancement, overall economic development, environment protection and control of sub-standard products in the local market.

ABDUL RASHID,
Director General
Pakistan National Accreditation Council

MESSAGE FROM THE SECRETARY

MINISTRY OF SCIENCE & TECHNOLOGY

Like in any other matter of serious national concern, in quality too, there has to be a policy to provide direction and guidelines to the various activities coming under its scope. The best intentions and honest efforts of the Government, organizations, and individuals can bear only limited results without an organized and structured policy framework in place.

It is in this background that the National Quality Policy & Plan (NQP& P) was mooted and brought out by Pakistan National Accreditation Council (PNAC), an autonomous organization of MoST, for providing the policy and institutional framework needed for the implementation of quality initiatives in virtually all segments of the society.

It is hoped that, with the proper implementation of the National Quality Policy & Plan there will be a greater awareness in the country and consequent continual improvement of quality & productivity to enable Pakistan face the challenges posed by the global economy, and make it a just, prosperous, and dignified nation.

KH. ZAHEER AHMED
Secretary, MoST

MESSAGE FROM THE MINISTER FOR SCIENCE & TECHNOLOGY

National Quality Policy satisfies the long awaited need of the country to develop all sectors of the economy including industry, agriculture and services. The need was articulated on several occasions but for the first time a meaningful step has been taken by the Ministry of Science & Technology for the formulation of a National Quality Policy & Plan in close collaboration with other relevant national organizations and experts. The policy document is meant to provide direction to all Quality and Productivity initiatives in the country.

Such a policy framework is imperative especially for our small and medium industries, agriculture and services sectors, which must be prepared not only to survive but also to compete in the new and emerging World Trade Order. Working within such a policy framework will allow our industry, agriculture and service sectors to develop quality strategies which would improve our credibility & reputation as a supplier of quality products and services both in the local & international markets.

The policy has given special attention to the strengthening and upgradation of the National Quality Infrastructure, which is pre-requisite to foreign direct investment and technology transfer.

I appreciate the efforts of PNAC and hope that the National Quality Policy & Plan will lead the nation towards accelerated social and economic development. The government will ensure to provide full support for the effective implementation of the National Quality Policy and Plan.

CH. NOURAIZ SHAKOOR KHAN
Minister for Science & Technology

INTRODUCTION

Economic prosperity is one of the key elements of the government's policies that will ultimately be followed by development in the social sector. Efforts are being made to deploy all efforts at national level to revive economic activities that will ultimately result in improvement in the quality of life. The priority of the government is the revival of economy through maximizing our exports.

In the present age of globalization of trade, market entry requires compliance to international standards and evidence of such compliance through an internationally recognized accreditation system of conformity assessment bodies. It means the strengthening and where needed the establishment of an internationally accepted infrastructure of accreditation, certification and testing.

The widespread use and application of sub-standard products and services in the local market is a serious threat to the health and safety of our consumers. There is no comprehensive Quality Policy to ensure supply of safe and Quality Products in the market. An urgent need to protect the rights of the consumers and establish a strong and effective regulatory mechanism using accredited laboratories, certification bodies and inspection agencies to control the use of sub-standard products and services in the market is therefore, considered essential.

Recognizing these developments, the Government of Pakistan has committed to strengthen and upgrade the national regulatory, accreditation and certification infrastructure to facilitate trade, enhance export, accelerate economic development, and protect environment, health & safety of the consumers.

Through the effective implementation of the policy, various quality and productivity programmes will be launched in consultation with all the stakeholders to contribute towards improvement in the quality of our products and services that will ultimately lead to the improvement in quality and lifestyle of the citizens.

AIM

The National Quality Policy & Plan aims at strengthening the national quality infrastructure to achieve accelerated economic growth, export enhancement, ensure supply of safe and quality products in the market at competitive prices and contribute towards environment protection.

OBJECTIVES

The NQP&P will develop an environment in which both public and private sectors in Pakistan can achieve excellence for the benefit of society. This policy is also intended to enhance Pakistan's reputation as a provider of quality products and services in the international market. The NQP&P objectives are:—

To clearly define the government's commitment to create an environment that allows initiatives, which promote the best quality practices in all sectors of the economy.

To develop strong quality infrastructure through strengthening and upgradation of Metrology, Standardization, testing and Quality assurance (MSTQ) setup, formulation and effective enforcement of technical regulations.

To take measures for the improvement of product quality and services.

To improve productivity through training and education and establishment of data banks.

To upgrade technology through R & D in key sectors, reorganization of R & D institutions and establishing cluster councils.

To create awareness and develop human resources, in the field of quality through seminars and courses to prepare our industries and other sectors to meet the challenges of New World Trade Order.

To protect the rights of the consumers through developing an effective regulatory mechanism, product certification and other conformity assessments schemes.

Efforts will be made to coordinate the activities of National Quality Policy and Plan with all other relevant national policies and plans in order to avoid overlaps and duplication of efforts.

CHAPTER NO. 1

COMMITMENT TO CREATE A QUALITY ENVIRONMENT

The Government of Pakistan is firmly committed to create a quality environment that will encourage local consumers to demand high quality products and services at affordable prices and facilitate procedures to meet such requirements. To cover specific areas under this programme, the government would undertake the following measures:—

- (a) *Establish a National Quality Council.*—Setting up a National Quality Council at the apex level would give all stakeholders a sense of ownership and impart impetus to the quality movement. This council will develop strategies and promote the overall quality programs and campaigns. The Council will be a blend of public and private sectors with authority and responsibility.
- (b) *Government to Promote Purchase of Quality Goods & Services.*—The government will promote the purchase of products and services supplied to all public sector organizations in accordance with national or international standards. The government agencies will publicize this policy and specify quality requirements for goods and services like agriculture products, health, banking etc. Producers and consumers will be encouraged to use standards and conformity assessment schemes on voluntary basis.
- (c) *Organize a Scheme for National Quality Award on Annual Basis.*—In order to give boost to the quality improvement practices, a National Quality Award Scheme will be launched featuring the development of a National Quality Week and culminating in a National Quality Award. It will result in accelerating the development of a national quality culture which would ultimately result in changing the attitudes of both producers and consumers. The award will be given in various categories on annual basis which will recognize the efforts of the producers and service providers in both public and private sectors.

A National Quality Award Scheme in education will also be established on annual basis for the secondary schools, colleges and universities both in the public & private sectors. This award will be given to the outstanding students and teachers who show excellence in their respective fields and follow the best Quality Improvement Practices.

- (d) *Promote Best Management Practices.*—It is an established fact that best management practices in any factory, school, office, or an organization providing services such as electric supply, telephone, water etc. lead to improvement in productivity, efficiency and quality. That ultimately helps in enhancement of economy, national life-style, security and other national activities. The government will support the public and private sector organizations to develop and implement best management practices according to national and international standards such as ISO 9000, 14000, etc.
- (e) *Promote Quality Culture.*—Through a quality awareness campaign, the concept that the consumer has a number of rights related to the quality of product and services that they buy, should be promoted. This objective could be achieved by the use of

advertisement campaign, newspaper articles and education of the masses through appropriate means. Industries and other organizations will be encouraged to adopt quality improvement practices in their day-to-day activities. The concepts and understanding of quality assurance will be promoted and the prevailing inspection and grading culture will be gradually eliminated.

Summary

- Establish a National Quality Council.
 - Provide support for implementing national and international standards.
 - Launch National Quality Award Schemes.
 - Promotion of quality culture through awareness raising campaign.
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CHAPTER NO. 2

INFRASTRUCTURE DEVELOPMENT

(a) **Strengthening and Upgradation of Metrology Standardization Testing and Quality (MSTQ) Infrastructure Including Technical Regulations**

A strong MSTQ infrastructure is a pre-requisite to export enhancement and market control of product & services. The standardization, accreditation, certification, testing, calibration and services as well as formulation and enforcement of technical regulations will be strengthened and upgraded according to national & international requirements.

(b) **Review & Vetting of Technical Regulations**

To promote quality, the technical regulations play a key role with respect to health, safety and environmental protection. These regulations should be reviewed, updated and vetted by the relevant ministries including Ministry of Environment, Ministry of Commerce, Ministry of Industries, Ministry of Agriculture, Ministry of Health etc., and all provincial governments. Through mandatory technical regulations, the government shall set requirements, aiming at ensuring health and safety of the consumer and environmental protection. These regulations shall be revised from time to time as necessary. The government shall strengthen the mechanisms for notification procedures for technical regulations. Technical regulations shall promote enforcement of standards and Conformity Assessment procedures through local government and use of inspection agencies operating in the private sector. Coordination of technical regulations and use of conformity assessment bodies including laboratories for the enforcement of mandatory standards will be channelized and both provincial & local governments will be involved actively in the enforcement of technical regulations.

(c) **Accreditation of Testing Laboratories**

Accreditation of testing laboratories to ISO 17025- the international standards for laboratories management will enhance their credibility at international level. Product certificates issued by testing laboratories give confidence to the importers, exporters and other users of such products. Selected labs would also be supported to participate in the proficiency testing program, which is an important requirement of ISO 17025.

(d) **Inspection, Testing and Calibration Services**

The government will promote and support the appropriate inspection, testing and calibration services and strengthen them to assist the industrial, agricultural, medical and other sectors of the economy.

(e) **Accreditation of Certification Bodies**

A large number of certification bodies are operating in the country for certifying local companies and manufacturing units according to the requirements of the international standards including ISO 9001 : 2000, ISO 14000, HACCP, SA 8000 etc. There is a need to keep some check on the activities of these companies and the validity of the certificates issued by them. For this purpose, accreditation of these companies with Pakistan National Accreditation Council (PNAC) may be encouraged and in future made mandatory. This will ensure quality of service

rendered by these companies, which will further result in improving the quality of activities of the organizations certified by such bodies.

(f) **Strengthening of Pakistan Standards & Quality Control Authority (PSQCA).**

Efforts would be made to strengthen the PSQCA. It should not only disseminate information on standards but it should be in a position to provide technical expertise and services for the promotion of standards and their use in the industry, agriculture & service sectors.

(g) **Strengthening of National Physical Standards Laboratory (NPSL).**

NPSL facilities will also be strengthened and upgraded to ensure its national and international traceability of metrology activities. The calibration facility of NPSL will also be supported to facilitate local industry in calibration of their equipment.

(h) **Strengthening of Pakistan National Accreditation Council (PNAC)**

Accreditation activities will be strengthened to attain international level recognition and credibility of conformity assessment bodies accredited by PNAC.

(i) **Upgradation and Strengthening of Laboratory Facilities**

The laboratory facilities in R & D organizations and universities will be upgraded in accordance with the need and requirements of the market. Laboratories will be supported to obtain accreditation to international standard for laboratory management and provide services at reasonable charges.

Establishment of testing laboratories near the industrial clusters will be encouraged and supported to facilitate the production units. The examples are leather, surgical and sports goods in Sialkot, electrical industry in Gujranwala, Gujrat, etc. Agriculture-related laboratories will be set up in the major crop areas.

Summary

- Strengthening & upgradation of MSTQ infrastructure.
 - Review & vetting of technical regulations
 - Accreditation of testing laboratories
 - Inspection, testing and calibration services
 - Accreditation of certification bodies
 - Strengthening of PSQCA, NPSL and PNAC
 - Strengthening, upgradation of laboratories near Industrial cluster and major crop areas.
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CHAPTER NO. 3

MEASURES TO IMPROVE PRODUCT QUALITY & SERVICES

Special emphasis will be laid on the improvement of product quality and services through following measures:—

- (a) *Improvement of Product / Service Quality*.—Producer cannot rely on government's initiatives alone. He must be encouraged and supported to build capacity through education and training programmes necessary to improve the skills and productivity of his employees at par with the international requirements.
- (b) *Adoption of an Efficient Quality Assurance System*.—The enterprises will be encouraged to adopt international standards of management, such as ISO 9000 and ISO 14000 to work towards continuous improvement of their management system.
- (c) *Sizable Industrial Production*.—Small-scale industries will be encouraged to specialize in one or two products of similar nature thereby increasing their production volumes, improving quality and reducing cost of their products.
- (d) *Centre of Information*.—Pakistan Standards & Quality Control Authority (PSQCA), Pakistan Council for Scientific & Industrialist Research (PCSIR), Pakistan Industrial Technical Assistance Centre (PITAC), Department of Agriculture & Livestock Products Marketing and Grading (DALPMG), Pakistan National Accreditation Council (PNAC) etc. will become centres and sources of information for export, industry and other enterprises to provide updates on standards, best management practices, R & D, testing & calibration facilities through networking with Chamber of Commerce and industries associations.

Summary

- Improvement of product quality.
 - Adoption of an efficient Quality Assessment System.
 - Production of sizable industrial batches.
 - Developing relevant national organization as a source of information on the best quality improvement practices.
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CHAPTER NO. 4

PRODUCTIVITY IMPROVEMENT

(a) **Improving Productivity**

Productivity is the efficient and effective management of resources. Improvement in productivity provides an excellent return on investment and therefore must be pursued vigorously. Measuring, monitoring and reducing those factors which create waste (for example: re-working of the product which failed to meet customer's requirements) result in improving productivity. Productivity, therefore, means creating more value for consumers by making better use of the processes and the resources employed in the production processes of an organization. Policy measures will be adopted to improve efficiency in terms of increased productivity, improved labour management relations, adoption of appropriate technology and optimizing use of locally manufactured equipment in main sectors of our economy.

(b) **Promotion of Productivity**

It will be ensured that Productivity gets promoted through training of human resources, public awareness and publicity campaign. For this purpose, identification of training and education needs along with the use of print and electronic media for a well-coordinated publicity campaign would be necessary.

(c) **Establishment of Data Banks**

Government will promote the establishment of data banks regarding failure rates, downtime and the repair cost of the usage of a product at organization's level. Because such data is the fundamental source for conversion of the information into continual development programmes of the organizations, it can stimulate innovation, improve productivity and quality of goods and services. The data shall be easily accessible for public and private sector organizations.

Summary

- Policy measures to improve efficiency & management practices.
 - Training and education for the promotion of quality and productivity.
 - Establishment of data and information bank
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CHAPTER NO. 5

TECHNOLOGY UPGRADATION

(a) **Replacement of Obsolete Machinery**

The government will encourage local entrepreneurs to replace the obsolete machinery and the existing outdated processes by new ones enabling them to compete in the international market. Banks would be advised to extend special line of credit to facilitate acquisition of indigenous as well as foreign appropriate technologies by our entrepreneurs.

(b) **R & D Requirements for Key Sectors**

Ministry of Science & Technology (MoST) will undertake a number of studies to identify the R & D requirements and shortcomings of industries' and other key sectors of the economy including agriculture. The priority for these studies will be those sectors, which have the potential for export. The MoST will establish a mechanism to identify the needs of the private as well as public sector for the development of new technologies. A system will be developed to provide government funding for selected research projects, which will be evaluated and monitored by teams selected from public and private sectors and R&D institutes. Research projects considered for government funding will enhance the existing trade mark promotion scheme supporting the image of high quality products made in Pakistan. The government will give subsidy and incentives to the enterprises which have established R & D activities in their organizations.

(c) **Re-organization of R & D Institutions**

R & D institutions will be reorganized to make them result-oriented. This is only possible if R & D staff pays regular visits to the industrial units in order to study the country's requirements and suggest ways and means for meeting these requirements. Efforts will be made to improve linkages between R & D institutions and the end-users.

(d) **Cluster Councils**

The government will strengthen the dissemination of technology information, incentives for R & D, test & calibration services and take other necessary measures to support initiatives of the small scale industry to develop niche technology in respective field. Application and use of technology will be promoted to improve continuously the products and services offered by various sectors of the economy. This can be achieved through matching grants for R & D, incentives for innovations and establishment of Cluster Councils.

Summary

- Upgradation of technology and replacement of obsolete machinery.
 - Promotion of R & D for quality and productivity enhancement.
 - Re-organization of R & D institutions.
 - Establishment of Cluster Councils.
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CHAPTER NO. 6

AWARENESS RAISING AND HUMAN RESOURCE DEVELOPMENT

(a) **Quality Consciousness**

The quality consciousness among the public, consumers, traders and manufacturers will be created through publicity in the main media i.e. television, radio and press.

(b) **Develop the Concept of Total Quality Government**

Quality movement can only be successful if government starts implementing quality management practices in its ministries and departments. In this regard, all federal ministries, attached departments and autonomous bodies, where possible, shall be certified to ISO 9000 Quality Management System. Special reward schemes will be launched for those who show excellence in performance. Programs like "Employee of the month "will be introduced in all government departments and agencies.

(c) **Quality at School / College Level**

Quality, as a subject, will be introduced at primary, secondary, higher secondary and college levels throughout the country. Short courses will also be arranged for the technical personnel, students and teachers to raise quality awareness.

(d) **Quality Video**

The senior management in any organization is responsible for stressing the importance of quality in all the departments involving everyone from top to bottom. Video programs motivating organizations and managers to follow such practices would be prepared and widely distributed. A well made video program will have a powerful and lasting impact on the minds of the viewers and it can be used over and over again for the employees of any organization.

(e) **Self-reliance**

Encourage the use of local material, manpower and other resources and improve their quality continuously.

(f) **Training for Inculcating Quality**

Launch training programme for quality improvement on regular basis for the chief executives, supervisors and workers of both producers and service providers.

(g) **Enhancing Skill of manpower**

One of our assets is our manpower. Immediate steps will be taken to enhance their skill levels. Quality should be enhanced by imparting skills to our workers and managers through local and foreign training in the appropriate fields.

(h) **Organizing Seminars for Exchanging Views**

Organize periodical meetings/seminars inviting participants from public, private, local & international organizations to exchange views on various quality improvement practices and take advantage from each other's experience and ideas.

(i) **Preparation for WTO Threats & Opportunities**

A large number of the small manufacturers, exporters and producers are not aware of the WTO's implications. Efforts will be made to educate them regarding threats and opportunities arising out of WTO regime.

Summary

- Creation of quality consciousness.
 - Development of the concept of total quality government.
 - Induction of quality as a subject in educational institutions.
 - Training for inculcating quality.
 - Organizing seminars.
 - Preparation for WTO threats and opportunities.
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CHAPTER NO. 7

CONSUMERS' RIGHTS PROTECTION

(a) **Legal Framework**

The government must provide a legal framework in which the consumer associations can operate and prosper and consumer's rights are protected. The education and awareness raising programs described in the previous chapters will help in raising awareness on quality issues among consumers. However, this needs to be re-inforced by the establishment of effective consumers' associations that have the ability to pursue cases or claims against fraudulent suppliers & producers. The consumer associations will have access to the legal process.

(b) **Product Certification**

With the support of legal framework, the consumers' rights should be reinforced by the development of an effective product certification scheme that issues a recognized quality/safety mark, which can be applied to products meeting the appropriate criteria. An effective product certification scheme will require strengthening of MSTQ activities, clearly defining product standards, competent and accredited testing services that use an accreditation mark, which is recognized internationally.

(c) **Quality Assurance**

The activities pertaining to Quality Assurance in vogue in various ministries and all public and private sector organizations shall be rationalized in accordance with international requirements. This will result in provisioning of quality items to the consumers besides improvement in efficiency and productivity of the government agencies providing services such as electricity, water and gas etc. All public sector organizations will ensure adoption of Quality Principles in the execution of their functions.

(d) **Preventing the Supply of Unsafe Products**

The government will ensure availability of quality products to the consumers and prohibit the import & supply of sub-standard & unsafe products including construction material and equipment used in factories and at sites through technical regulations and use of standards and conformity assessment bodies.

(e) **Control on Sub-standard Imports**

- o A law will be passed for importers that all the industrial raw material especially used in food, beverages and pharmaceutical sector will be imported from companies certified to national & international standards.
- o Import of scrap will not be allowed.

Summary

- Legal framework for the consumers' rights protection
 - An effective product certification scheme
 - Rationalize activities of various Ministries relating to Quality Assurance
 - Preventing supply of unsafe products and controlling sub-standard imports.
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Section 2

**ACTION PLAN FOR THE IMPLEMENTATION OF
NATIONAL QUALITY POLICY OF PAKISTAN**

The National Quality Plan will be implemented at a cost of Rs 10.00 billion (approximately) over a period of 5 years as per following projects, programmes, studies etc:-

S. NO.	ACTIVITY	RESPONSIBILITY	TIME / DURATION	COST (in millions)
1	Commitment To Create Quality Environment			
1 a.	Establish a National Quality Council To prepare a notification for the establishment of a National Quality Council as an apex body to oversee the promotion and overall implementation of the quality infrastructure and programmes and operationalize the National Quality Council. The council will be headed by the Prime Minister and co-chaired by Minister for Science and Technology and Minister for Commerce. The council will be represented by the relevant Minister, President of Federation of Chambers and other leading industrialists, professionals and experts of national repute.	MoST PNAC	5 years	-
1 b.	Issue notification for the establishment of Implementation Committee of NQP & P and set up a cell within PNAC to coordinate implementation monitoring and evaluation of NQP& P and hold regular quarterly meetings. Professional staff will be engaged in the implementation cell.	MoST PNAC	5 years	20.00
1 c.	Establishment of Implementation Cell to coordinate the implementation of NQP & P at provincial level.	Provincial departments	5 years	20.00
1.d	<u>Use of Technical Regulation.</u>			
(i)	The implementation committee to identify and operationalize the focal point to co-ordinate the technical regulations necessary to promote the use of products and services in accordance with the applicable standard.	MoST/ Other relevant Ministries & Provincial Department	1 year	1.00
(ii)	Conduct training of the related personnel including lawyers & judges for preparation, adoption and enforcement of technical regulations concerning quality, environment, health and safety issues.	PNAC / MoST / Other relevant Organizations	3 years	20.00

1e.	Promotion and Purchase of Quality Goods & Services.			
(i)	Encourage, motivate, support, enforce and regulate where necessary the use of products and services in accordance with the national or international standards. The products may also include major crops, dairy, fishery, fruit, vegetables, refinery products, coal, gas, mineral products, etc	Concerned Regulatory Bodies MoST PNAC	5 years	10.00
(ii)	Enforce the use of accredited Conformity Assessment Procedures through technical regulations.	Concerned Regulatory Bodies MoST PNAC	5 years	10.00
1 f.	Organise a Scheme for National Quality Award on Annual Basis			
(i)	Prepare a framework for launching the National Quality Award Scheme on annual basis to create competition amongst various sectors of public and private organisations and declare annually the winner of the award.	EAC (focal point) M/o I & P, PNAC, PSQCA, SMEDA, Ministry of Agriculture Ministry of Petroleum & Natural Resources	On-going 5years	20.00
(ii)	To establish an Annual awards Scheme for secondary schools, colleges and institutes of higher learning both in private and public sector of the country.	Min of Education	On-going 5 years	15.00
1 g.	<u>Promote Best Management Practices</u> To launch incentive schemes in public and private sector organizations to develop and implement best management practices by adopting national and international standards including ISO 9000, ISO 14000, ISO 17025, SA 8000, etc.	MoST (focal point), EAC (M/o I & P) Min of Commerce Min of Environment	5 years	100.00
1 h.	<u>Promote Quality Culture</u> Preparation of programme for print and electronic media to promote quality culture amongst consumers, producers, regulators and other stakeholders pertaining to quality of products and services.	MoST (focal point) Min of Information PSQCA, PNAC Consumer Associations	5 years	25.00
		Total of Chapter 1: 241 m		

2	Infrastructure Development			
2 a.	Strengthening and upgradation of MSTQ Infrastructure Including Technical Regulations To strengthen and upgrade 100 testing and calibration laboratories in the country preferring those supporting export sector.	MoST (focal point) Other organisations	5 years	5000

2 b.	Accreditation of Testing Laboratories To develop and implement programmes to support 100 laboratories to take part in proficiency testing on regular basis.	PNAC (focal point) PSQCA/NPSL PCSIR/PARC PEPA	5 years	20
2 c.	Strengthening the Analytical Facilities of Animal Nutrition Laboratory at Animal Production Division, Peshawar The laboratory at present provides only chemical analysis facilities to its clients. It lacks in the facilities of feed/fodder analysis for which modern analytical equipment is required. Laboratory facilities to improve quality of poultry/livestock feed and fodder will be strengthened.	MINFAL	3 years	6.00
2 d.	Strengthening of National Agriculture Research Centre's Labs. Laboratory facilities in the field of agriculture will be strengthened, upgraded and where need arises establish in accordance with international requirements.	MINFAL	2 years	282.00
2 e.	Customer Test Services To support consumer associations in undertaking an independent evaluation of the product so that the consumers could make a sound judgment about the quality of the product.	PNAC (focal point) PSQCA	3 years	10.00
2 f.	Strengthening of PSQCA To strengthen PSQCA for the improvement of quality products through adoption & dissemination of standards and providing training programmes for the use and application of standards.	PSQCA	3 years	200.00
2 g.	Strengthening of NPSL Upgrade and strengthen NPSL to establish national and international traceability in the field of metrology.	NPSL	3 years	200.00
2 h.	Strengthening of PNAC			
(i)	Establish headquarters of PNAC at Islamabad.	PNAC/MoST/ Ministry of Finance	5 years	60.00
(ii)	Strengthen and upgrade its activities through training and joint accreditation with other renowned accreditation bodies of the world.	Do	5 years	20.00
(iii)	Secure membership of PAC, IAF & ILAC to enhance international credibility of PNAC and participate regularly in their activities.	Do	5 years	20.00
2 i.	Accreditation of 15 inspection agencies.	PNAC	5 years	20.00
		Total of chapter 2: 5838.00 m		

3	Promote Product Quality, Services and processes.			
3 a.	To continually improve the quality of products and services through training and education programmes.	MoST, MOE, EAC (M/o I & P), PNAC, PSQCA & other relevant agencies.	3 years	25.00
3 b.	<u>Adoption of an Efficient Quality Assurance System</u> To promote and implement the Quality Circle schemes in 100 selected firms.	EAC (focal point) M/o I & P, MoST / PSQCA, SMEDA	5 years	15.00
3 c.	<u>Sizable Industrial Production</u>			
(i)	Selection and assessment of 2 to 3 specialized industrial sectors having potential for export and growth, through professional survey and studies.	EAC (focal point) M/o I & P, PCST	1 year	2.00
(ii)	Strengthening the dissemination of technology information.	PCST	3 years	5.00
3 d.	<u>Centre of Information</u> To establish centres of information in major cities of the country for providing up-to-date information to the exporters, consumers, industry, Chambers of Commerce and industrial associations on standards, technical regulations and conformity assessment.	EAC (focal point) M/o I & P, M/o Commerce PSQCA PNAC EPB	5 years	40.00
		Total of Chapter 3: 87 m		
4	Productivity Improvement			
4 a.	Training of CEs, supervisors and workers for productivity enhancement and carrying out assessment surveys.	NPO (M/o I & P)	5 years	340.00
4 b.	To establish a data bank at enterprise level regarding failure rate, downtime cost, inefficiency, etc, in the relevant sectors	EAC (focal point) M/o I & P, R & D organizations of MoST, NPO	3 years	50.00
		Total of Chapter 4: 390 m		
5	Technology upgradation			
5 a.	R&D Requirements for Key Industries			
(i)	Conduct studies to identify the R & D needs of 10 selected sectors having potential for export	PCST (focal point) Min of Agriculture EAC (M/o I & P) Min of Commerce	1 years	6.00
(ii)	Prepare and implement the R & D projects, identified through surveys and studies on cost sharing basis.	Min Environment MoST (focal point) Min of Agri, MoE M/o I & P, EAC	3 years	620.00

5 b.	Re-organization of R & D Institutions			
(i)	Finalize a legal frame work for selected R&D organizations of MoST to develop technologies for commercial use and strengthen their linkages with users and industry.	MoST	3 years	6.00
(ii)	Implement the re-organization plan for selected R & D Organizations.	MoST	2 years	60.00
(iii)	Re-structure the R & D organizations to support industrial productivity & quality.	MoST (focal point) & other relevant ministries.	3 years	160.00
		Total of chapter 5: 852 m		
6	Awareness Raising and Training			
6 a.	<u>Quality Consciousness</u>			
	Launch awareness raising programme for consumers, traders, manufacturers and society through print and electronic media on the use of quality products and services and holding of seminars/ workshops etc.	MoST, (focal point) Min of Information PNAC, PSQCA, EAC, (M/o I & P) EPB	3 years	350.00
6 b.	Develop the Concept of Total Quality Government			
(i)	To arrange certification of various ministries and departments to ISO 9001: 2000 in order to improve their quality of service.	Establishment Div (focal point) other organizations MoST	3 years	20.00
(ii)	To start a programme on “employee of the month” in various government departments and give cash awards to those who excel in performance.	Establishment Div (focal point) MoST	3 years	50.00
6 c.	Quality at Schools and Technical Education			
(i)	Develop curriculum and start teaching quality as a subject in 100 selected schools and colleges.	Min of Education	2 years	5.00
(ii)	Expand the programme to all other schools and technical institutions.	Min of Education	3 years	100.00
6 d.	Inculcating Quality Culture			
(i)	Launch quality improvement programme in 250 selected organizations, firms and industry using resource persons, media, skills development techniques and local and foreign trainers.	EAC (Focal point), M/o I & P SMEDA MoST, M/o Education	3 years	470.00
(ii)	To organize periodical meetings/ seminars inviting participants from public, private, local & international organizations to exchange views and benefit from each other’s ideas and experiences in the field of Quality.	MoST (focal point) EAC (M/o I & P) Ministry of Commerce PNAC, PSQCA, NPSL	3years	15.00

6 e.	<u>Human Resource Development</u>			
(i)	Launch training programme on cost sharing basis for 100 selected manufacturing organizations to train their management to be more responsive towards quality issues.	SMEDA (focal point) M/o I & P,	2 years	110.00
(ii)	Launch training programmes for management of 100 selected organizations from service sector on cost sharing basis to be responsive towards their duties.	SMEDA (Focal point) M/o I & P M/o Commerce	2 years	100.00
6 f.	Capacity Building of 24 Training Institutes & 5 Export-Related Projects			
i)	Provision of machinery & equipment for workshops and laboratories of 24 training institutes.	M/o Commerce (focal point) MoST M/o I & P	3 years	240.00
ii)	Provision of technical experts for redesigning of programmes, curricula and physical facilities, training of trainers and conduct specialized courses	M/o Commerce (focal point) MoST, M/o I & P	3 years	20.00
iii)	Establishment of affiliation arrangements_with foreign institutions of good repute	M/o Commerce (focal point) MoST M/o I & P	3 years	15.00
iv)	Fellowship/training programmes for training & development of local faculty of 29 training institutes/projects	Min of Commerce (focal point) MoST M/o I & P	3 years	125.00
v)	Establishment of R & D Centers and facilities for identification, evaluation, cutting, polishing and certification of gemstones.	M/o Commerce (focal point) MoST M/o I & P	3 years	150.00
vi)	Establishment of internationally accredited Drug Testing Laboratories for pharmaceutical industry.	M/o Commerce (focal point) MoST M/o I & P	2 years	150.00
6 g.	Establishment of Quality Awareness Campaign amongst consumers.			
	Assist consumer's associations to start a quality awareness campaign amongst consumers through publication of material, articles in newspapers, and holding of seminars/workshops, etc.	PNAC (focal point) CRCP	2 years	6.00
		Total of Chapter 6: 1926 m		
7	Consumers' Rights Protection			
7 a.	Legal Framework			
	Formulate and approve a legal framework to prevent unsafe products and services and protect the rights of consumers.	MoST Ministry of Law Consumer Associations	1 years	1.00

7 b.	Preventing the Supply of Unsafe Products and Services			
(i)	To expand the list of compulsory certification mark schemes to protect consumers and prohibit the supply of "unsafe" products.	PSQCA & other agencies	5 years	5.00
(ii)	Train and prepare the use of accredited inspection bodies and product certification for implementation of the compulsory certification scheme.	MoST PSQCA	2 years	205.00
(iii)	Training and involvement of provincial and local governments in enforcement of the scheme.	MoST PSQCA Relevant agencies	3 years	15.00
(iv)	Strengthen and support consumer's organisations to publish consumer bulletins and periodicals focusing on Quality.	PSQCA PNAC	5 years	5.00
		Total of Chapter 7: 231 m		
	Sub-total (A)			9565 m

SPECIFIC PROJECTS OF THE ACTION PLAN

S. No	Project	Organisation	Duration	Cost (Rs.)
1.	Detection of Toxins	PCSIR Labs, Karachi	3 years	30.00 m
	Accreditation of Labs.	.....Do.....	6 months	5.00 m
	Quality Control of Pharmaceutical Products	.....Do.....	2 years	20.00 m
	Preservation of Fish	.....Do.....	3 years	10.00 m
2.	Synthesis and fabrication of superconductors and investigation of organic material	GIK, Topi	2 years	1.00 m
3.	Promotion of writers to publish books, articles on quality related issues. (by National Book Foundation)	Ministry of Education	5 years	10.00m
	Donation of Pakistani Books on quality to Pak missions (by National Book Foundation)	.....Do.....	3 years	2.50 m
4.	Establishment of Deptt on Quality Promotion.	Institute of Chemical Engg. & Technology	3 years	45.00 m
5.	Estb. of National Cleaner Production Centre	PSQCA, Karachi	5 years	94.00 m
6.	Training Program in TQM	NUST, Rawalpindi	3 years	8.00 m
7.	Upgradation of Analysis facilities for Environmental Testing	PCRET, Islamabad	2 years	18.00 m
8.	Strengthening & Updating of Laboratories at NWFP UET, Peshawar	NWFP University of Engineering & Technology, Peshawar	3 years	153.00 m
9.	QMS in Higher Education	NED University of Engg. & Technology, Karachi	9 months	2.00 m
10.	Setting up of calibration & testing facilities for electronic testing & measuring equipment	NIE Islamabad	2 years	12.00 m
11.	Extractive Metallurgy Studies of Antimony Ore in Chitral	PCSIR Labs. Peshawar	4 years	1.00 m
Sub-total (B)				411.50m
Grand Total (A) + (B)				9565.00+ 411.50m = 9976.50 m Say 10 billion

IMPLEMENTATION MECHANISM

The implementation of the National Quality Policy & Plan will be achieved through an Implementation Committee headed by the Minister for Science & Technology. A Cell, comprised competent professionals, would be established in the PNAC to serve as a Secretariat to the Implementation Committee and also coordinate implementation of the Action Plan. The composition of the Committee will be as follows:

- Federal Minister for Science and Technology (Chairman)
- Secretary Ministry of Science & Technology.
- Secretary Planning & Development
- Secretary Education
- Secretary Industries, Production & Special Initiatives
- Secretary Commerce
- Secretary Textile
- Secretary Food, Agriculture & Livestock
- Secretary Interior
- Secretary Environment
- Subject Specialist/Expert designated by the HEC
- Representatives from FPCCI,
- Members of all the four Provinces,
- A renowned scientist or engineer from the private sector nominated by the Ministry of Science & Technology.
- A renowned professional from the private sector nominated by Ministry of Science & Technology.
- DG PNAC (Secretary/Member)

The Implementation Committee will meet once every three months and review the progress of implementation. Implementation Cells will also be created in the respective provincial governments, to coordinate implementation of NQP&P at the provincial level.

Section 3

ABBREVIATIONS

ADB	Asian Development Bank
AQD	Animal Quarantine Department
CRCP	Consumer Rights Commission of Pakistan
DALPME	Department of Agriculture & Livestock Products Marketing & Grading
DPP	Department of Plant Protection
EAC	Experts Advisory Cell
EU	European Union
FPCCI	Federation of Pakistan Chamber of Commerce & Industry
FSC&RD	Federal Seed Certification and Registration Department
GIK	Ghulam Ishaq Khan Institute of Technology
IAF	International Accreditation Forum
ILAC	International Laboratory Accreditation Cooperation
ISO	International Organization of Standardization
MINFAL	Ministry of Food, Agriculture and Livestock
MoE	Ministry of Environment
M/o I & P	Ministry of Industries and Production
MoST	Ministry of Science and Technology
MSTQ	Metrology Standardization Technology and Quality
R&D	Research and Development
NARC	National Agriculture Research Council
NGO's	Non Governmental Organization
NPO	National Productivity Organization
NPSL	National Physical & Standards Laboratory
NQC	National Quality Council
NQP&P	National Quality Policy and Plan
NUST	National University of Science and Technology
PAC	Pacific (Rim) Accreditation Council
PCRET	Pakistan Council of Renewable Energy & Technology
PCSIR	Pakistan Council for Scientific and Industrial Research
PCST	Pakistan Council for Science and Technology
PEPA	Pakistan Environmental Protection Agency
PITAC	Pakistan Industrial Technical Assistance Centre
PNAC	Pakistan National Accreditation Council

PPARC	Pakistan Public Administration Research Centre, (M. S. Wing, Estab.iv.)
PSQCA	Pakistan Standards and Quality Control Authority
SMEDA	Small and Medium Enterprises Development Authority
SPS	Sanitary Phytosanitary Measures
TBT	Technical Barrier to Trade
TDF	Technology Development Funds
WTO	World Trade Organization