PAKISTAN – COUNTRY REPORT

I. Country Statistics

Pakistan is an agricultural country. Total geographical area is about 80,000 sq. km. and agriculture land is about 22 million ha. Total GDP is US $ 148 billion. Per capita income defined as GNP at market price in dollar terms is US $ 925. However, population undernourishment is about 23%.

The economy of Pakistan is largely based on agriculture. It contributes about 25% to the national economy, provides employment for over 44% of the labor force and is main source of income in rural areas, which accounts for 70% of total population. The well being of the economy depends largely on the production, processing and distribution of major products such as cotton, wheat, edible oil, sugar, milk and meat. Last year agriculture sector grew by 5%. However, in the last decade, agriculture grew at an annual average rate of 4.5 per cent and exhibited fluctuating trend mainly on account of weather conditions, pest attacks on crops, shortage of inputs and little attention given to its sub sectors other than crop farming.

II. Plant Quarantine / Phytosanitary System

1. Plant Quarantine work is done by Plant Quarantine Division in the Department of Plant Protection, which has the legal authority and management responsibility. The organization arrangements are as per Article IV of the International Plant Protection Convention, 1997. The Head Office is at Karachi and the quarantine stations are located at the sea ports, airports, dry ports and land border points for the convenience of traders. These are modestly staffed and equipped.

2. The working of the plant quarantine division, actions and decisions are according to Pakistan Plant Quarantine Act, 1976 and Pakistan Plant Quarantine Rules, 1967. Few aspects like LMO are covered by Bio-safety Rules and Bio-safety Guidelines, 2005.The lists of Quarantine Pests are notified by the government regarding;

List A – 1: List of Destructive Pests and Diseases not yet established in Asia and the Pacific Region

List A-2: List of Pests and Diseases Present but of Limited Distribution in Asia and the Pacific Region

3. The objective is to implement the above legislation in order to protect crop and forest wealth and to facilitate trade of plants and plant materials.

The plant quarantine division handles 6 to 7 millions tons of plants, plant products and the other material on the import and export side each year. Botanists, entomologists, pathologists and the other related staff do the job. The procedure is presented.

The import of any plant or plant material which may be a source or medium of infestation or infection by diseases and pests destructive to agriculture or medium for the introduction of noxious weeds are regulated by issuing import permit prior to such importation and except through the ports or points of entry. Import permit is issued to the importable item according to the rules and list of quarantine pests.

The papers such as import permit, certificate of origin, phytosanitary certificate, treatment certificate, bill of lading, invoice, letter of credit, anchorage permit and the other documents, in respect of import consignments are checked for genuineness and proper entries. Physical inspection is conducted at the time of entry of the consignment for any insect pest and disease. If there is no pest or disease found the consignment is released. Support of laboratories are sought in case of any problem which is not identifiable during inspection. Violations and infringements are adequately dealt with.

Plant and plant material meant for export is inspected for any injurious insect and plant diseases. Plants and plant material which are found free from pests and diseases are issued phytosanitary certificate before shipment of consignment. Freedom from quarantine pests and application of suitable treatment if necessary is ascertained. The assessment of compliance by the local exporter is also made.

Inspection is carried out in godowns, warehouses, dry ports, and entry and exit points. Shipholds, containers, baggages, and packets in mail are also inspected. The plant and plant products in imports, export or transit are inspected. Propagating material and perishables are given high priority. Department has standard sampling and examination methods, which are followed according to the nature and quantity of commodity. Disaster relief goods are prioritized. Items of consumption, and those, which are semi-processed are considered low risk objects. The quarantine inspectors have the necessary kit for the job. The presence of insects, fungi, nematodes etc. is determined and where necessary, species are got confirmed. It is seen that no quarantine pests are transmitted through agricultural trade. The national pest list, regional pest lists and quarantine pest lists of the trading partners are constantly kept in view.

On the export side, a phytosanitary certificate is issued if the consignment is free of quarantine pest at the time of inspection and or suitably treated. For the import consignments a release order is issued if the material is free of quarantine pests and or suitably treated. The import consignments refused entry may be sent back or destroyed. Some material may be released after segregation. The treatment of plant products include dry dressing, spraying and fumigation with due care to the operators and the environment. This follows inspection and issuance of a release order or phytosanitary certificate (PC) from the plant quarantine service. The staff of Pakistan Customs under the Finance Ministry does it.

All International Standards on Phytosanitary Measures are adhered to including ISPM-13 and non-compliance notification is issued to the exporting country’s NPPO contact point.

During the year 2006-07 the Plant Quarantine Division issued 28698 Release Order 62942 Phytosanitary Certificates and 15795 Import Permits. There were 28698 inspections conducted on import sides. Pakistan Plant Quarantine Rules are under revision. Central Plant Quarantine Laboratory and three regional labs are being completed. Equipment is being installed and recruitment of personnel is under process. A total of 08 PRA of different crops including Apple, citrus, grapes, mango, onion, potato, rice and wheat are completed for different insects and pathogens but they are being made in conformity ISPM.

III. Surveillance, Pest Outbreaks and Invasive Species Management

The Provincial and Federal Agriculture Department staff does general surveillance and specific survey of field crops, forests, plantations and orchards. The Provincial Governments make pest survey reporting on weekly and fortnightly basis during the crop seasons and farmers are advised for rational use of pesticides for controlling of pests.

Extensive survey of locusts and fruit flies is done by the Department of Plant Protection. The pest species are got identified from the local and foreign experts. Type specimens and collections are maintained and also sent to international organizations for record and reference. Pest lists are made, updated and conveyed to the FAO and the trading partners upon request.

There are about 900 permanent personnel deputed for surveillance and 1500 designated staff for control of field pests of national importance. The Department of Plant Protection has maintained staff of 43 persons for surveillance and control of migratory and periodically occurring pests like desert locust.

Survey of fruit fly in different provinces is being undertaken to identify the pests and its distribution. Plant Quarantine Rules are being updated to accommodate surveillance and eradication of different economic pests. Plant Quarantine Lab are strengthen with new equipment. Three projects for establishment of post-entry quarantine, disinfestations of mango fruit fly through vapour heat treatment and recruitment of qualified staff for these projects. It will enhance the capability of the department in surveillance, preparation of PRA and eradication of target pests.

IV. Pest Management

Reliance on IPM has been emphasized in the National Agricultural policy of Pakistan in 1980. The National Agricultural Commission in its report published in March, 1988 has given broad out lines of IPM and recommended that IPM techniques should be adopted for major crops by 1992 or 1993 and for all crops by 1995.

Plant protection measures currently comprise, largely, of the use of pesticides, which has grown from about 915 tons in 1981 to 43,577 tons in 2006. With regard to use, the most heavily covered crop is cotton followed by paddy, sugarcane, fruits and vegetables. Cotton alone accounts for about 70% of the total consumption of active ingredient of pesticides and this has resulted in the phenomenal rise in cotton production in the country.

Excessive use of pesticide is checked through pest warning / scouting system executed by the provincial agricultural departments. Farmers are advised through print and electronic media to undertake application of pesticides only when the pest population crosses the economic threshold level (ETL). In this way judicious use of pesticides is encouraged. The Government has also instituted a National Integrated Pest Management (IPM) programme to minimize the use of pesticides. Similarly trainings are imparted to farmers in safe handling, use and application of pesticides by the provincial governments and the technical staff of the industry.

The Government has initiated a project for Good Agricultural Practices (GAP) for certification of orchards from where exports will be made to different countries. Federal Government with the coordination of provincial agriculture departments has devised different strategies for pest management of cotton, wheat and rice crop. IPM project is being implemented in cotton in Punjab and Sindh Provinces. A record production of 13.0 million bales of cotton was obtained during 2006-07. With introduction of IPM program the pesticides market is shrinking from US $ 173 million during 2005 to US $ 98 million during 2006.

V. Pesticide Management

The use of pesticides in Pakistan commenced in 1952. It started with the introduction of an aerial spraying program on the key crops such as, cotton, rice and sugarcane. Simultaneously, pesticides were also used for locust control. The desert locust control program was organized through an international network coordinated by the FAO.

Before 1971, pesticides to be imported were standardized by the Federal Government through Department of Plant Protection (DPP), since no rules regulations were in place.

Agricultural Pesticides Ordinance (APO) was promulgated in 1971 to regulate import, manufacture, formulation, sale, distribution, use and advertisement of pesticides.

Agricultural Pesticides Rules were made thereunder in 1973 and the whole business was put under regular standardization and registration with the help of Provincial Agriculture Departments. Pesticides are registered under the trade name (Form-1) after efficacy evaluation trials of two crop seasons by at least two research agencies including Provincial and Federal ones. The products to be approved under this scheme are first standardization by the Provincial Government with final approval granted by the Federal Government on advice of Agricultural Pesticides Technical Advisory Committee (APTAC). It normally takes three years to get a product approved under Form-1 scheme.

In 1993, two new kinds of registration import permission (Form-16 & Form-17) viz.; Generic Scheme and Permission / Registration Abroad Scheme were launched. Generic name registration is granted to products designed by the Federal Government, which are no valid patent right and are already tested and trialed on Form-1. Permission (Registration Abroad) Scheme is conditional to the registration of new chemistries that are prior registered and used in any of the OECD countries or China. The result of liberalized policy of 1992 has been phenomenal. Import from diversified sources and induction of more than 175 new entrepreneurs as against about 30 until 1993 have given the desired results i.e. enhancement of healthy

competition and the availability of effective and inexpensive pesticides. Pesticide is the only agricultural input where the prices of frequently used products are either contained or have declined by 30-40% generally and in few cases even up to 60% specially reduction in price despite devaluation of Pak Rupees.

Agriculture Pesticides Ordinance is revised and ready to place before the Parliament for its approval. Agriculture Pesticides Rules have been amended and two new rules are added viz. pre-shipment inspection of pesticides in the country of origin and waiving of condition of sample analysis in registration of generic pesticide from the source / manufacturer already registered with the department.

A new pesticide lab is established in Balochistan province for quality check of agriculture pesticides.

Manufacturing of pesticides in the country is still in infancy and country has to be dependent on import from China and other countries. This has resulted in shortage of pesticides during epidemic situation.

Currently the Department has registered 220 active ingredients among which there are 12 bio-pesticides (Abamectin, Emamectin, Bt, Neem products etc.). The Department has restricted and banned all the products including on PIC, POPs and dirty dozen.

The registration of outlets / dealerships is with the provincial agriculture departments who has licensed about 2600 outlets. During 2006 there were 6648 samples analyzed and 245 were found violating the quality standards of pesticides.