

TECHNICAL ASSISTANCE COMPLETION REPORT¹

Division : CWEN

TA No., Country and Name RETA 6339: Partnership on Persistent Organic Pollutants Pesticides Management for Agricultural Production in Central Asian Countries			Amount Approved: \$400,000	
			Revised Amount: \$400,000	
Executing Agency Asian Development Bank		Source of Funding Government of the People's Republic of China		Amount Undisbursed: \$238,866.07
				Amount Utilized: \$161,133.93
TA Approval Date 25 Aug 2006	TA Signing Date: n/a	Fielding of First Consultant 1 July 2007	TA Completion Date Original: 30 Oct 2007 Actual: 30 Apr 2008 Account Closing Date Original: 30 Oct 2007 Actual: 16 Oct 2008	
Description The technical assistance (TA) established an international partnership of participating countries and development partners to review the use and storage of obsolete persistent organic pollutants (POP) pesticides in agriculture in Central Asian Countries (CACs). The aim was to then re-introduce integrated pest management to agriculture so significantly reducing the need for pesticides.				
Expected Impact, Outcome and Outputs The expected outcome was a partnership on POP pesticide management for agricultural production in the CACs. The underlying aim was to limit or remove access to stores of obsolete POPs pesticides in Central Asia so preventing their continued illegal use; while at the same time developing demonstration projects of an alternative approach involving integrated pest management. The TA's main outputs were (i) a CAC regional working group established for IPM application and sound POP pesticide management in agricultural production; (ii) a report prepared on international experience in dealing with stores of obsolete POPs pesticides and its implications for the CACs; (iii) alternative pest management options developed (including IPM and substitute chemicals) and pilot demonstration program designed; (iv) an investment program and funding mechanism designed for cleanup and management of sites contaminated with POP pesticides.				
Delivery of Inputs and Conduct of Activities The project was assigned to a number of different project officers within CWAE and CWOD. The leadership changes meant that there was a lack of consistency and uneven effort in managing the project throughout its scheduled period. More constant attention to the project may have improved the overall performance. The notice for the recruitment of the international consultant for the project did not attract many applicants with suitable experience in the field. The recruitment of an international academic did not prove to be a success. Although technically competent and assessed as satisfactory, the consultant had serious problems in delivering the required outputs within the required timeframe. The inception report was six months late and no progress reports were delivered. In light of this it was decided to change consultants to replace the original consultant with two new consultants to try and recover some of the lost time. At the commencement of the TA, an International Partnership on POPs Pesticides Management in Central Asia was established. This Central Asia POPs Partnership provided guidance and direction to the work of a consultant team, which included an international POP management specialist, an international IPM specialist and national consultants drawn from each of the focal countries. The establishment of a think tank of technical experts, who were kind enough to provide their expertise free of charge, was a major success. The ability to utilize the combined expertise and experience of the think tank allowed the project to move forward at considerable pace during the later months and so negate some of the earlier delays.				
Evaluation of Outputs and Achievement of Outcome Inception Workshop. A TA Inception Workshop was held in Beijing, China from 31 October to 2 November 2007. The meeting was hosted by ADB and the State Environmental Protection Administration of China (SEPA). The meeting was divided into two parts titled, "Central Asia Environmental Policy Dialogue" and the "Inception Mission for the Partnership on POPs Pesticides Management in Central Asia". The second part of the meeting, the Inception Workshop for the International Partnership on POPs Pesticides Management in Central Asia, was held over two days, 1 November to 2 November 2007. This meeting had three main objectives: (i) to review the current situation within each county regarding the management of POPs pesticides, the implementation of the Stockholm Convention, and the use of IPM; (ii) to agree on an approach and commitment to regional cooperation; and (iii) to develop specific ideas for demonstration projects for future funding proposals.				
Establishment of International Partnership on POPs Pesticides Management in Central Asia. The participants of the Inception Workshop agreed that the Central Asia POPs Partnership would be the focal point for guiding further work under the TA. It was envisioned that this group would also evolve into a focused working group to guide the development of funding proposals and the implementation of future demonstration projects in the CACs. A further step in the development of the partnership was the establishment of a Technical Subgroup of Experts involving ADB, Food and Agriculture Organization of the United Nations, United Nations Environment Programme, the International HCH and Pesticides Association (IHPA) and the United States Environmental				

¹ In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Protection Agency. This subgroup has operated as a “think tank” on POPs management issues in the CACs region and has contributed additional ideas to the demonstration project concepts.

Report on International Experience on POP Pesticide Management. An important outcome of the TA was the preparation of the report on international experience on POPs pesticide management and its implications for CACs. The report, which was prepared by the TA in consultation with the participating countries and development partners, includes: (i) a review of the implementation status of the Stockholm Convention in the focal countries; and (ii) a review of international experience and processes for environmentally sound management of POPs pesticides, including detailed information on risk reduction strategies and remediation technologies. The report identifies that each of the focal countries has significant stockpiles of obsolete POPs pesticides in storehouses, burial grounds and other sites such as disused airfields and railway sidings. These are often in close proximity to settlements. Since the end of the Soviet era, these storage areas have been poorly maintained and have in some cases been vandalized for building materials or disturbed in order to gain access to pesticides for resale and use in agriculture. As a result many sites now suffer from serious levels of soil and ground water contamination, which poses significant environmental and human health risks and requires urgent site management and remediation. Current capacity for destruction of hazardous wastes and environmentally sound management of contaminated sites is however lacking in the CACs, with present options for POPs stockpile destruction limited to repackaging and shipment to Europe for incineration. This is a process that is hazardous in terms of the potential risks involved in the transboundary shipment of toxic wastes, prohibitively expensive, and increasingly subject to public opposition in Europe. It is therefore clear that the development and pilot testing of regionally feasible POPs management and destruction technologies for the Central Asia is urgently needed. A basis for selecting potential options, the POPs Experience Report reviews a comprehensive range of remediation technologies and makes a number of recommendations regarding their feasibility for the CACs. Further work on this issue is however required due to a current lack of commercial testing of many of the technologies and limited information of costs.

Review of Alternative Pest Management Options. The TA Inception Workshop concluded that combining work on POPs elimination and integrated pest management (IPM) is a promising strategy for developing a broad based approach for improving pest management and pesticide health and safety issues in Central Asia. Common issues shared by CACs make this a good topic for regional cooperation. Such a strategy should ideally build on the remnants of past IPM programs and bio-control networks which existed during the Soviet era in the CACs. These programs provided a valuable contribution to the agricultural sector and facilitated significant reduction in pesticide use. Apart from an active bio-control network in Uzbekistan, these networks are now however seriously under-resourced and their agricultural extension function has been all but abandoned. This leaves farmers without non-chemical means of pest control. To reduce demand for POPs pesticides, the TA has therefore recommended the strengthening of the previous system of bio-control facilities, with support to introduce current concepts and techniques for IPM as a cost effective alternative to the use of POPs pesticides. To provide guidance on this strategy, the TA prepared a “Design Outline for an Integrated Pest Management Component”. The IPM Design Report includes (i) an introduction IPM; (ii) a review of the history and status of pest management issues and approaches to IPM in the CACs; and (iii) elaborates options for demonstration projects targeting a reduction in POPs pesticide use in agriculture in the CACs.

Proposed Demonstration Projects. Building on the recommendation from the TA Inception Workshop and the findings of the two main TA reports, a concept for a “Green Silk Road Initiative” has been developed. The concept includes two main components, which are proposed be undertaken simultaneously: (i) demonstration of the feasibility of suitable technologies to clean-up POPs pesticide wastes; and (ii) demonstration trials for alternative pest management in agriculture in the CACs.

Overall Assessment and Rating

Partly successful. Three of the four expected outputs were achieved however the design of an investment program and funding mechanism for cleanup and management of sites contaminated with POP pesticides was not achieved. The major reason for this is the remote locations of the remaining stockpiles and the very high costs per m3 for clean up. The long term sustainability of the outputs was not achieved. The slippage in schedule and the late delivery of key documents meant that there wasn't sufficient time to develop the required in-country demonstrations.

Major Lessons

There are a number of issues relating to agriculture, environment and natural resources in the region which are common to all countries; the disposal of POPs pesticides in one such issue. These form a potential starting point for increasing regional cooperation in environmental management. The original scope of work can be considered to be over ambitious in terms of planned achievements, the very high costs for clean up of contaminated sites meant that it wasn't possible to develop an investment program and funding mechanism. Lack of consistent oversight and management in the early stages resulted in poor performance and delays to the program. A dedicated project leader in place for the entire program would have much more effective for the management of the project.

Recommendations and Follow-Up Actions

The fully costed approach for an IPM demonstration project should be considered as a component for future projects in the agriculture and environment fields.