

## SUPPORT FOR RINDERPEST SURVEILLANCE IN WEST ASIA (RAW/5/004) D3 New

### CORE FINANCING

YEAR	Experts		Equipment	Fellowships		Scientific Visits		Training	Sub-contracts	Misc. Comp.	Total US \$
	m/d	US \$	US \$	m/d	US \$	m/d	US \$	US \$	US \$	US \$	
1995	14/ 0	159,600	174,000	12/ 0	39,600	-	-	40,000	-	-	413,200
1996	14/ 0	168,000	80,000	12/ 0	41,400	-	-	40,000	-	-	329,400
1997	14/ 0	176,400	40,000	-	-	-	-	40,000	-	-	256,400
1998	14/ 0	184,800	40,000	-	-	-	-	40,000	-	-	264,800

First Year Approved: 95

**OBJECTIVES:** To establish and regionally co-ordinate the use of an ELISA based system for rinderpest seromonitoring and surveillance in support of national vaccination programmes to eradicate rinderpest from countries in West Asia.

**BACKGROUND:** Livestock and their products are vital to the economies of most countries in West Asia. However, several major livestock diseases still occur in this region, the most important of which is rinderpest. Despite an intensive vaccination programme during the past six years, co-ordinated under the FAO Regional Project WAREC (West Asian Rinderpest Eradication Campaign), deaths and substantial losses continue to occur, with confirmed outbreaks in Iran, Turkey and Iraq in 1994. A single vaccination will give lifelong immunity and therefore eradication through mass vaccination is a fully achievable goal. It is essential, however, that over 85% of the animals are immune, and this has clearly not been achieved in the region. What has been shown to be highly effective in Africa is the implementation of an ELISA based surveillance programme at a national level to ensure that these high levels of immunity through vaccination are achieved and that when annual vaccination stops, any remaining pockets of infection can be identified and that eradication of the disease and its causative virus can be verified at the international level.

**PROJECT PLAN:** During the first year, most of the countries will be visited by the regional expert and the required inputs in terms of equipment and training identified. A workshop will be held in the region in May 1995 to provide training in the FAO/IAEA rinderpest ELISA kit, and a detailed workplan will be prepared with each country. This will ensure that by the end of 1995 a national serological survey is completed and the sera tested. A full report will be published in 1996 giving immunity levels in all participating countries, including Turkey and Egypt. Those countries experiencing technical difficulties with the implementation of the technique will be visited by the regional expert in both 1995 and 1996. Two scientists from the region will be identified for advanced training in rinderpest diagnosis and surveillance at the World Reference Laboratory in the United Kingdom.

**REGIONAL AND NATIONAL COMMITMENT:** All participating WAREC countries have clearly indicated their willingness to make the necessary national resources available to achieve eradication through mass vaccination and to verify this by serosurveillance. Each country will provide adequate laboratory buildings, staff and infrastructural resources to permit routine seromonitoring.

**AGENCY INPUT:** Expert services, including a full-time regional expert to ensure the successful transfer of the ELISA technique and the routine use of the ELISA based system; equipment where necessary, together with internationally standardized and validated ELISA kits; annual workshops for dissemination of national seromonitoring results on a regional basis.

**IMPACT:** As a result of effective rinderpest monitoring and surveillance, national rinderpest vaccination campaigns should effectively eradicate the disease from the region within five years. Vaccination costs (approximately \$40 million per annum) and losses due to animal deaths (estimated at \$360 million per outbreak) would then be eliminated and livestock movement and trade both within and outside the region would increase.