

FOREWORD

One of the tasks of the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture is to promote the use of nuclear techniques for improving disease diagnosis and monitoring disease control programmes in order to optimise animal production in developing countries. An applied research programme was initiated in 1998 with funding from the Regular Budget to promote farmyard poultry production in Africa by developing practical vaccination strategies against Newcastle disease and Gumboro disease in various countries in Africa and monitoring immunity using an ELISA technique. Following initial discussions with experts from various universities and FAO it became clear that in order to improve farmyard poultry production effectively it was essential to initiate a holistic approach. Consequently, it was decided to first collect production data of the existing situation in a standardised fashion, subsequently analyse the production constraints and finally initiate interventions not only by vaccinating poultry but also by introducing improvements in housing, feeding and commercialisation. At the same time a practical and robust ELISA test for detecting antibodies against Newcastle disease was developed at the FAO/IAEA Agriculture and Biotechnology Laboratory in Seibersdorf, Austria. The results of the standardised survey to collect production data of the current situation are reported in the present publication together with an analysis of production constraints, a number of review articles on family poultry production in Africa and a comparative analysis of the results from the various countries.

FAO and IAEA wish to acknowledge the perseverance and initiative shown by the scientists working under field conditions in Africa, where data collection was not an easy task and encouraging the collaboration of the farmers was an essential part. The advice and support from scientists with an expertise in the field of family poultry, such as F. Sonaiya (Obafemi Awolowo University, Ile-Ife, Nigeria), U. Minga (Sokoine University of Agriculture, Morogoro, Tanzania), J. Bell (Agri Art, Morocco), B. Goodger (University of Wisconsin, Madison, USA), F. Davelaar (Fort Dodge Animal Health Holland, Weesp, The Netherlands), A. Permin (The Royal Veterinary and Agricultural University, Frederiksberg, Denmark) is highly appreciated. The Technical Officer of the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture responsible for initiating the programme and the resulting publication is R.H. Dwinger.