Abstract
Malaysia, due to its rapid growth and structured changes, has transformed into a prosperous, urban and industrialized economy since early ’70s. Less than 5% households are considered poor compared to 50% in 1957, when the country achieved its independence. However, there are still substantial spatial individuals living in poverty, especially in rural areas. One of the sectors under food security in Malaysia, for protein sustainability, is increasing the amount of animal protein, so that they are readily accessible to the rural poor. Chicken meat has been identified as the cheapest source of animal protein. Poultry industry in Malaysia, largely propelled by the private sector, has significant contribution in supplying the protein needs of the population as reflected by the higher percentage share of the sector in the total livestock value. The annual production of eggs and meat are valued between RM 1.78 billion and RM 6.03 billion. Besides being a cheap source of protein, chicken has a special status due to its general acceptance among the Malaysian multi-racial and multi-ethnic population, since there is no religious restrictions associated with it. The rapid growth of the poultry industry is primarily due to the advances in poultry management, nutrition, genetics and better disease diagnosis and control. However, infectious diseases are still the major causes of losses in poultry industry and farmers depend mainly on imported vaccines, which are costly and sometimes may not be very effective. The need to provide constant source of cheap animal protein to the rural poor led our team to be involved in food security initiatives via disease control, by embarking on poultry vaccines development, targeting the control of diseases in village chickens, as well as commercial chickens. We focus on enhancing the health of poultry especially village chickens, for more than 20 years, by developing efficacious vaccines which are cheaper than the imported vaccines. One of the vaccines is for Newcastle disease, which is a very important disease in poultry, worldwide. The success of this vaccine, has led to an increase in number of village chickens being reared by rural
farmers. Some farmers now rear large number of village chickens semiintensively. The development of this vaccine has also led to the establishment of the first and the only animal vaccine manufacturing company in the country, and it is now certified with Good Manufacturing Practice (GMP). Our research group has developed two other vaccines which are now sold in more than 8 countries. This paper highlights the stages of vaccine developments, from research, development, laboratory and field trials, up scaling and commercialization.