As we look into the topic, Research and research applications for national development is not a pleasant story with respect to the status of biological diversity in Sri Lanka.

Center to the conservation of wild life is the major in situ approach of wild life conservation, while there are different ways of ex situ approaches which includes the methods of conservation of wild life in places away from their natural habitats.

In the in situ approach of conservation, there are almost 13% in the wild life sector and equivalent of about 10% from forest sector. Altogether Sri Lanka is a proud owner of 23% protected areas highlighting the biggest question “how good are they protected”.

Under the fauna and flora protection ordinance, there are different categories including strict nature reserves, national parks, sanctuaries, buffer zones and marine parks. There is a special mechanism of identifying these areas as protected areas. There are areas where some activities are permitted and some are not. For an instance strict nature reserves are the areas where only research is permitted. However the number of researches carried out in these areas is negligible. For last couple of years authorities have not granted the permission to carry out any research programmes in these strict nature reserves. This is the reality of the things related to national conservation happening in Sri Lanka.

There are almost 20 national parks currently in Sri Lanka where the visitors are permitted to see flora and fauna. Among all of these national parks, the most commonly known national park is Yala which is only about 15 km², a place confined to only one animal. It makes lots of income which is sufficient to carry out research if the income is diverted in a correct manner, there by answering the problem of need of money for research.

These protected areas represent an approach to resources used and provides multiple benefits to society. Almost 14 % of protected areas in Sri Lanka is a result of development. It is the bitter truth which many of the people refuse to accept. If not for the development purpose, today Sri Lankans would not have the largest sanctuaries in the country i.e., Victoria, Randenigala, Rantabe, Gal Oya national park, Maduru oya and Udawalawa national park etc. So the development has also provided great opportunities for conservation.

Of about 45 % of the land in the accelerated Mahaweli project was protected. However, the research carried out to ensure that protected declaration is sustained and negligible.

In the field of conservation biology, there is nothing called basic but also have various applications. Managers need information to enable themselves to manage the systems because many of the protected areas which are the last areas where the fauna and flora remain without influence of human are becoming islands in the middle of the development. As a result they are greatly influenced by many factors. In order to overcome this problem, managers need to have proper inventory, species information, interrelationships that exists in the system and monitor the dynamic changes in the process of achieving the objectives of management system.

As per the current scenario, these protected areas are greatly disturbed by human. For an example, in Sinharaja where Prof. Sarath Kotagama has worked for more than 30 years, are 22 villages that depend directly on the Sinharaja. Sinharaja was protected only because of logging since it is the only place where there are trees left behind for plywood factories and the protection was achieved in 1998 for political reasons. However in order to state the Sinharaja as a world heritage site, the authorities were given the task of finding scientific evidence for not logging. That is the main course to start research in Sinharaja in terms of inventory. In 1933 and 1956, it was recommended that the Sinharaja to be declared as a strict nature reserve but was failed due to the timber need of the country. However, now it was saved as a result of research carried out in Sinharaja.
Among the various researches carried out in Sri Lanka, in 1965 – 1982 Dr. Dittus came up with a project “The Ceylon Elephant And Primate Ecology Study” from the Smithsonian Institute. During this study maps of Wilpattu and Yala on vegetation, soil, hydrography, topography and movement of elephants was constructed by the survey department of Sri Lanka and the inventory was done by the Smithsonian Institute where all of these information went missing.

In 1984 – 1989 during Mahaweli Environment Programme, lots of research were carried out and lots of documents were produced. However none of them were used to address the problems till today.

In 1992 – 2000, inventories was done for many of the protected areas and based on them management plans were prepared by the consultants from abroad which was rejected by the authorities.

Prof. Sarath Kotagama was appointed as deputy leader of the ABD project in 2002 – 2008 which was greatly refused by many people and the ownership was hand over to department of wildlife conservation. Same like the previous studies, nothing from this project was implemented till today.

In Sri Lanka a large number of researches are caring out but the applications are very less.

The biggest problem with the biggest animal is the human elephant conflict where Sri Lanka lose 150 elephants and 50 people every year. In the history of elephant research, various researches have been carried out and by 1998 there were 425 publications which were documented.

According to Prof. Sarath Kotagama, there is an increase in the number of elephants in Sri Lanka which leads to various problems in human life style and economy of the country. In order to overcome this human elephant conflict, electric fencing, translocation and driving were considered as the effective options. However translocation and driving can’t be considered as a good option since it leads to various disasters and act as a death warrant to the animal.

Not only the elephants but also monkeys, peacocks and various other species cause problems which need to be tackled through proper information.

As a whole, there are lots of information and basic research carried out but very little consorted effective applications. If people are willing to apply those available information in the correct way by changing the direction what we are up to now, we will be able to resolve 90 % of the issues.

Lastly, Research professionalism comes by understanding the information properly and making it applicable for the benefit in conservation.