

## Press Release

Genomics of organisms are creating myriad possibilities for improving productivity from agriculture be it plants, animals or microorganisms. Globally there is a tremendous potential for harnessing the benefits of genomic studies for manipulating organisms, according to the needs of mankind. In the genomic era the barrier between plant and animals and organisms should go otherwise the Bt cotton could not have been possible as it contained the genome a cotton plant and a bacteria said Dr. Mangala Rai, Secretary, Deptt of Agricultural Research and Education and Director General, Indian Council of Agricultural Research while inaugurating a two day National Symposium on 'Livestock Genomics for productivity enhancement and food security' on 3 July, 2008 at NASC Complex, DPS Marg, Todapur, New Delhi. He elaborated that the animal scientist have a long way to go for upgrading his animals and suggested that models of Israel and Brazil should be emulated in India. He also advocated that the Indian livestock is unique that it maintains the 11% of world's livestock population with 4% of the global water share. This gives enormous potential on Indian soil. He also expressed concern about the increasing population and its affluence and the associated increment in demand for food of animal origin. For meeting this challenge he advocated a holistic approach comprising of not only genetic improvement but also nutrition, reproduction and health care management to achieve targeted goals. While touching on the impending climate change it was informed that conversion of C3 to C4 for human food and animal feed and fodder is of paramount importance. While narrating the initiative of ICAR on animal genomics, he emphasized that a programme on buffalo genomics including whole genome sequencing has begun by the Council in its associated Institutes. This is only a beginning and further initiative will be made in species which is in the pipeline. One of the major constraint envisioned by him in Research and development is constraint of skilled manpower to carry out the technical programme.

A 2 day National Symposium on 'Livestock Genomics for productivity enhancement and food security' was organized by the Indian Society of Animal Genetics and Breeding on 3<sup>rd</sup> July, 2008. Dr. K.M. Bujarbaruah, Deputy Director General (AS) who presided over the function mentioned that genetics is king of disciplines in biological science and expectations are also much higher from the king. Citing the American mode of development of increasing 2500 kg milk/animal/lactation he advocated that selective breeding brought marvels in animal science and still has relevance which can be augmented by application of genomic tools. Dr. Bujarbaruah narrated that the Animal Science Division is totally overhauling their research programmes with special emphasis on molecular tools.

Dr. P.N. Bhat, Patron of the Society advocated that whole animal cloning should also be used in conjunction with genomic application to rapidly achieve the goals. He also mentioned that the achievements of the sector by crossbreeding should not be forgotten inspite of limitations.

Dr. T.J. Rasool, Assistant Director General(AP&B) introduced the theme of the National Symposium and also focused on the road map of using molecular tools in enhancing livestock productivity. He also suggested that India should be a partner in the National Consortium to not only share the knowledge but also harness it in improving our own livestock health and human resource.

Dr. Sethi, Director, CIRB, Hisar and Organizing Secretary welcomed the dignitaries on the occasion and expressed that the Symposium will help in deliberating new upcoming issues and need of molecular tools in both livestock and poultry sector for improving the economic traits.

Dr. B.K. Joshi, Director, NBAGR and Organizing Secretary thanked Dr. Mangala Rai, Secretary, DARE and DG, ICAR, Dr. K.M. Bujarbaruah, DDG(AS), Dr. P.N. Bhat, Patron, Indian Society of Animal Genetics and Breeding for their esteemed presence as well as enlightening the house with their thought provoking words regarding the need of today's research in the area of genomics for improving productivity for food security.