## Introduction of Murrah Buffalo and Sahiwal Cattle

The world famous indigenous Murrah buffalo has been brought at ICAR Research Complex, Tripura Centre recently in the month of April 2013 for research and developmental purposes. Buffalo population in Tripura is only 14,000 as against 9.5 lakhs cattle population. In fact, buffalo has not received due attention for milk production not only in Tripura but also in the whole northeastern region of India. Presently, the per capita availability of milk in Tripura is 81g/day as against the national average of 258 g/day. Under the tremendous milk deficit conditions in Tripura, Murrah buffalo may be explored for boosting milk production. Buffalo milk contains comparative higher levels of total solids, fat (6.5%), protein (3.5%), calcium, phosphorus and less cholesterol compared to cow's milk. While buffalo contributes 72.6 million tones of milk (55%) out of the total milk production of 132 million tones in India, it is need of the hour to try with our indigenous buffaloes in Tripura for milk production with high economic value. Hence, ICAR Research Complex, Tripura Centre located at Lembucherra, West Tripura has brought few Murrah buffaloes from Rohtak district of Haryana which is well-known for the breeding tract of Murrah buffalo and exporting thousands of high yielder Murrah buffaloes. Data on adaptability and/or suitability of Murrah buffalo to subtropical, humid and high rainfall conditions of Tripura, local feed resources and managemental conditions owing to affect milk production and reproductive performances at what extent is not available in Tripura till date. That's why, ICAR Research Complex, Tripura Centre has undertaken a research project to investigate the performances of Murrah buffaloes in Tripura agro-climatic conditions.

Murrah buffalo has massive body frame with short, broad back and a comparatively light neck and head. It has short, tightly curled horns, well developed udder and a long tail with a white switch reaching to the fetlock. Popular colour is jet black with white markings on the tail, face and extremities. The skin is soft, smooth with scanty hair. The body weight of female Murrah buffalo ranges from 350 kg to 475 kg, body condition scoring from 2.75 to 4 out of 5 point scale and blood haemoglobin between 11.6 to 13.4 gm% recorded at our livestock farm. The average milk production potential is 6 liter and above per day as registered at ICAR livestock farm. The advantages of buffalo farming indicate that buffaloes are more hardy animals than cattle. Buffaloes graze a wide range of plants as compared to cattle. The digestibility of crude fiber and protein is usually greater than cattle, because of higher bacterial activity in the larger rumen. Keeping in view of all advantages of buffalo farming, research on Murrah buffaloes may open some scopes for milk production in near future in the state of Tripura.

Sahiwal cattle are another new addition to ICAR livestock farm. Sahiwal is one of the best dairy indigenous breeds in India. The origin of Sahiwal cattle is Sahiwal district of Pakistan and now available in Punjab, Haryana, U.P., M.P. and Bihar. Sahiwal are heavy breed cattle with broad head, voluminous dewlap, prominent naval flap, short and stumpy horns (not exceed 3 inches), loose skin, symmetrical body. Skin colours are various shades of red, pale red and dark brown splashed with white. Long whip like tail almost reaching to the ground, tapering to a good black switch. The body weight of female Murrah buffalo ranges from 300 kg to 325 kg, body condition scoring from 3.0 to 4.37 and blood haemoglobin between 9.2 to 11.0 gm% recorded at our livestock farm. The average milk production potential is 5 liter and above per day as registered at ICAR livestock farm. The aim is to investigate the performances of Sahiwal breed as well as Sahiwal x Jersey crossbred cattle (in comparison to Tripura local x Jersey crossbred cattle) in Tripura agro-climatic conditions. (Information: In Jamaica Sahiwal x Jersey crossbred cattle has been evolved as Jamaica Hope Breed).



Plate 1 Murrah buffalo at ICAR livestock farm, Lembucherra, West Tripura



Plate 2 Sahiwal cattle at ICAR livestock farm, Lembucherra, West Tripura