

ACI's solution and prevention of Mastitis

Mastitis was first observed 5000 years ago when cattle was domesticated. It is one of the three main diseases in dairy farming leading to severe economic losses. Dairy farmers face financial setbacks as the disease reduces milk production (70%), leads to premature culling (14%) and increased veterinary costs.

The dairy sector is increasing as cultivable land is decreasing hence Mastitis has a direct impact on the livelihood of poor people. A survey conducted in the major milk-producing countries indicates that each year clinical mastitis afflicts 15% to 20% of cows. In Canada and the United States, it is thought that 50% of cows have one or more infected quarters. In Denmark, it is estimated that mastitis is the cause of 30% to 40% of veterinary interventions.

The pattern of mastitis occurrence in Asia is also significantly increasing in both cattle and buffaloes which is a major challenge for policy makers, field veterinarians and researchers. In Bangladesh almost 70-80% of milking cows are suffering from subclinical mastitis and among them 10-15% show clinical mastitis.

ACI Agribusinesses has launched a range of antibiotics to cure the mastitis disease. The antibiotic therapy is for 5-7 days where the drug can be administered through intravenous, intramuscular or oral routes. Our products- Acicef-3, Acigent10, Acipilline, Strepto-p, salidon, Oxytet100 injection can be administered through the intravenous and intramuscular routes. While our Diatrim, Tmprimis, Bactitab boluses can be used through the oral route. We also have products to prevent mastitis from dairy farms, e.g. antiseptics like Virocid, Savlon can be used to spray the whole udder, floor, teat cups of milking machines and also for sterilizing hands of milking men.

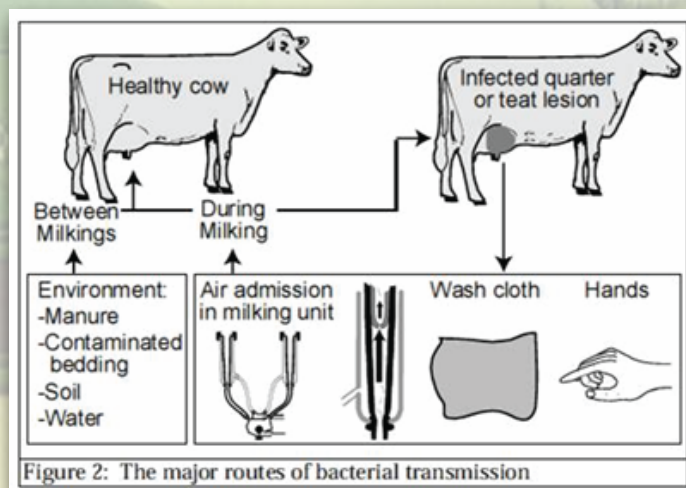
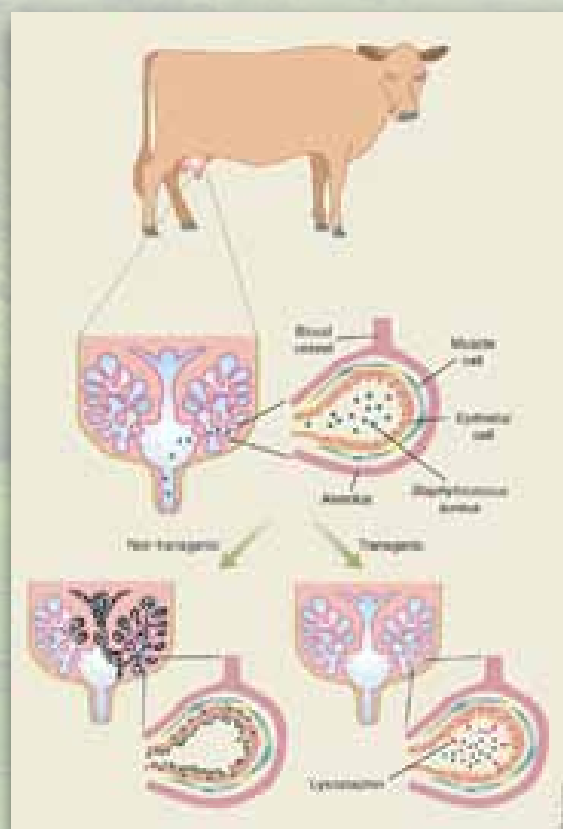


Figure 2: The major routes of bacterial transmission

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ACI Seed arranged feedback meetings on Boro rice

ACI Seed has successfully arranged around fifteen feedback meetings on its Boro rice including hybrid and inbred at different parts of the country. Outstanding meetings were held in the Rangpur Area at one of the rice prone areas of Bonarpara, Gaibandha. About 45-50 rice farmers of Bonarpara assembled in an open field and gave important feedback regarding BRRI dhan 28 and 29 as well as Hybrid Rice.

Both the inbred varieties have given around 15-20% higher yield in comparison to varieties from other competitors, including the Government. In case of hybrid rice it was found that ACI-1, Sera and Folon-2 had average yield potentiality against competitor varieties.

According to the farmers' feedback, the disease resistance ability of ACI Hybrid was better than other hybrid varieties.



ACI Seed arranged Retailer Training Programs across the country

ACI Seed under ACI-IFC cooperation arranged eight 1-day training events on **crop production and seed marketing** for the seed retailers. The goal behind the trainings was to help them identify ways of catering better to the unique needs of the farmers. These retailers, will reach poor farmers in remote areas and pass this knowledge to farmers. Through these trainings updated information on ACI Seed products were disseminated.

In such an event at Bhola, Dr. Shafiqul Aktar, Business Manager of ACI Seed was present and he said, 'The training empowered retailers to perform better and win bigger market share and sales of ACI Seed.' At the end of the program, he distributed certificates and gifts among the participants.

ACI Seed also successfully completed three seed retailer training programs in North Bengal under the ACI-IFC fund, where about 170 seed retailers attended. The programs were held at Thakurgaon, Lalmonirhat and Rajshahi on 8th, 9th and 11th June 2013 respectively. Day long training sessions were designed on crop production technology and seed marketing techniques. The retailers were delighted to be able to participate in such training programs and thanked ACI Seed for arranging the event. Through their feedback it was found that ACI Seed

marketed varieties were showing excellent performance. They requested ACI management to maintain the quality of the products and organize such training programs annually as they believe through the knowledge gained harvests will increase. All participants received a certificate for their efforts during the program.



Training program for rice & vegetable production and technology

A training program on **Rice & Vegetable Production and Technology** under ACI-IFC cooperation was held on 2-4 June, 2013 at BARI, Gazipur. A total of 27 participants involved in production, sales, research and promotion of ACI Seed attended the training program. The inaugural and closing sessions were attended by Dr. Md. Mokhlesur Rahman, Director (T&C), and Dr. Lutfur Rahman, CSO, BARI, Gazipur. Dr. Md. Shafiqul Aktar, Business Manager, ACI Seed visited the training activities. Dr Md. Akter Hossain, PDS Manager coordinated of the training event.

The Rice & Vegetable Production and Technology program was designed to provide instructions on soil, crop production, soils and management. Updated crop technology was infused into the program, wherever possible. This in-service training will help the trainee of ACI Seed to perform their duties more efficiently and effectively. On behalf of ACI a special commendation is given to BARI for providing technical assistance.



ACI Seed went into massive promotion of summer cauliflower

Cauliflower is a popular vegetable in Bangladesh, but a challenging one to grow in summer when temperatures are on the rise. Thus heat tolerant summer varieties are demanded by the farmers. In response to this need **ACI Seed** has launched a variety that can produce big, quality curd (head) at high ambient temperature that during March-June under the brand name of Maradona.

The variety performed very well in a yield trial at Chuadanga in 2012. For stability of performances, PDS has completed 20 field demonstrations at Chuadanga, Meherpur and Jessore (an important growing belt for summer cauliflower) during March-June, 2013.

As per the demo results from these areas, the variety yielded good quality curd with an average weight of 550g at 50 days after transplanting. The seedling and young leaves can endure the heat and do not wilt under high temperature. So, its irrigation requirement is low in comparison with other heat tolerant varieties of cauliflower. It is also reported that, in terms of seedling vigor, days to maturity, compactness, curd weight, Maradona was far superior to the other two varieties of the two competitors used as check in the demonstrations.

In June 2013, for wider extension and adoption of the variety, 4 field days involving 300 farmers at Chuadanga, Meherpur were held. Also seven more farmers' meetings at seven demo sites across the demo belt were held. Furthermore, cut fruits were exhibited in the shops of all of our retailers and dealers at Chuadanga, Meherpur and Jessore. Area Sales Executive of Jessore, Mr. Md. Dudu Mia in the field day at Chuadanga said, "The variety has generated a very good response among the farmers, retailers and dealers and would contribute a bigger acreage in summer cauliflower cultivation in this belt".



ACI Fertilizer launches product for root growth

ACI Fertilizer launched a new technology product named “**Bumper Root Grow**”, which has a high market potential. The product contains 1-Napthalic Acetic Acid, a plant hormone of the auxin family, which especially target the root growth of plants.

The key benefit of the product is that it encourages the formation of plant root and adventitious root. The product also benefits rooting for enhanced growth of seed, root and Solanaceae skewer inserted raw fibrous roots; promote fruiting and the rapid expansion of root tubers, vegetables & fruit trees. It can improve the rate of production of commercial fruit and through its anti-drop characteristic, prevent flower and fruit drop significantly. The product not only increases production, improves quality, stimulates lush foliage, robust role in plant, but also effectively provides resistance to cold, drought, water logging, disease and saline-alkali.



Promotion of new hormone for Summer Tomato by ACI Fertilizer

Bumper Folon (4-CPA) is a specialized product for the Summer Tomato, which is used on the new flowers for preventing flower drop and ensuring fruiting from each flower. To promote the high potentiality of the product, **ACI Fertilizer** has engaged itself in farmer and retailer programs, engaged temporary promoters and utilized various types of promotional materials.



ACI Fertilizer participates in National Tree & Environment Fair 2013

ACI Fertilizer has participated in the National Tree and Environment Fair 2013. ACI Fertilizer provides complete nutrient solutions to plants by supplying soil health products, nutrients deficiency correctors, supplementary products and plant growth regulators. The products supplying the complete nutrient solution was exhibited at the fair. ACI Fertilizer made their exhibition interactive to attract more visitors.



Fixed Day Fixed Service- a new service campaign by ACI Motors

ACI Motors Limited has been hosting one-day free service campaigns for its valued clients at the different service points throughout the country. This campaign was promoted as “**Fixed Day, Fixed Service**”. The campaign has been providing a platform to raise awareness of genuine spare part’s importance, periodic maintenance, proper vehicle operation and safety. The event has been ensuring our valued customers that their vehicles are in optimum operating condition and will not face any set back during the harvesting season.

During the event, our service team meets all of our new and old clients to solve their problems. This increased the client’s faith on ACI Motors, the service policy and products, leading to promotion of brand and reputation in the market.

ACI Motors service team is also opening service centers throughout the country to establish an efficient after sales service and establish its motto “Service within Six Hours”. Each member of the field force has been provided with motorcycles, hence promising fast, smooth and vigorous service.



ACI Motors participates in Seed & Agro-Technology fair

ACI Motors along with **ACI Seed & ACI Fertilizer** participated in **Seed & Agro-Technology fair** under the National Agriculture Technology Project (NATP) which was held at Hatkhola High School ground, Daudkandi, Comilla from 7th - 9th June 2013. ACI Motors demonstrated its new technologies to local farmers, dealers, researchers and Krishi officers. Huge interest was generated about VIKYNO reaper and SONARTRAC. Government high officials and higher Agri personnel, DG Seed, Ministry of Agriculture; GM, Farm Division, BADC; DD, BADC, Comilla; researcher from BARI; UAO, Daudkandi visited the stall of ACI Agribusinesses and learnt about new premium quality products.

These products will reduce production cost and time of farmers up to a benchmarked level while continuing its contribution to create wealth for farmers:

Famous folk song of Chapainawabganj “Gombhira” mostly known as “Nana-Natir Gaan” was presented at the fair to create awareness among the farmers about usage of new technologies brought by ACI to reduce production cost and achieve optimum gain. ACI Agribusinesses achieved best participator award from the organizers of the fair.



Participation at Fruits Fair by ACI Cropex

ACI Cropex has participated in the Fruits Fair organized by Ministry of Agriculture at the Bangladesh Agriculture Research Centre (BARC). The fair was held from 16th to 18th June 2013 and was jointly inaugurated by the Honorable Agriculture Minister, Begum Motia Chowdhury as well as the distinguished Environment Minister, Dr. Hasan Mahmud. Through this fair ACI Cropex has transferred the message for safe fruits for all, which was covered by BTv.



ACI Cropex arranges mango Sales Center

ACI Cropex has organized a fair at Niketan Housing Society, where a variety of carbide free mangoes are being offered. The seasonal delicacies are being brought to the fair from well known mango hubs at Jhenaidah, Jessore and Chapainawabganj. Staff of ACI Cropex is ensuring the fruits are carbide free through strict supervision while they are being plucked. Now the mango varieties- Gopalbhogh, Himsagar, Lengra, Mollika, Amropoli, Fazli and Arshin are available at the fair throughout the season. ACI Cropex also initiated the awareness program of fresh fruits through this fair.

The carbide free mangoes are also being supplied at prominent retail outlets in Dhaka, including Shawpno and CSD, by ACI Cropex.



ACI Animal Health launches innovative new products

ACI Animal Health is continuously striving to develop products which will increase the growth of livestock, poultry, fisheries and reduce animal diseases. The business unit has introduced four new products in the market which will increase healthy and disease free poultry in Bangladesh.

The unique formulation of **Fra® Multizyme** is a microencapsulated & nano-technology applied liquid/dry multi-enzyme complex. Fra® Multizyme is stable at 100°C up to 15 minutes. It ensures the growth performance of chicken and reduces harmful effects of anti-nutritional factors from corn-soya. This improves the digestion and feed conversion ratio of corn-soya diets. It further improves break-down of starch and non-starch polysaccharides in the poultry diet. The product is sold under the pack size: 100 ml, 500 ml & 1litre.

Another product **FRA® BLP** (liquid/dry premix) is a combination of phyto-genic substances and organic acids which prevents specific intestinal diseases, e.g. Necrotic Enterities and reduces respiratory distress in poultry. It is available under the pack size: 100ml & 1litre.

Acivit – Cipro (oral solution) is a broad spectrum antibiotic preparation while **Acivit-ADE (Vet)** is a combine preparation of Vitamin A, D3 & E. To increase the market share along with its pack size, 100ml Acivit – Cipro (oral solution) can be also found under the pack size 500ml, and Acivit-ADE (VET) oral solution can be found under pack size 100ml.



Experts bat for mechanization of farming in Bangladesh

Agriculture experts have stressed for speeding up farm activities through mechanization of agriculture to make it more profitable, face labor-shortage, reduce production cost and increase crop yields. A demonstration of the combined harvester was made among 400 farmers, during Boro crop cutting ceremonies at Pirgachha and Mithapukur upazilas by the Department of Agriculture Extension (DAE).

The officials, experts and farmers witnessed harvesting and cleaning process of BRRRI Dhan 29 variety Boro paddy in shorter period using the Combined Harvester machine saving both money and time. While addressing these ceremonies, the experts said that the farmers can harvest and clean Boro paddy of one acre land within 90 minutes using Combined Harvester machine at fifty per cent reduced cost in quicker time than when engaging traditional methods.



Indian government clears GM trials despite opposition

India's environment ministry's Genetic Engineering Appraisal Committee (GEAC) has allowed field trials of genetically modified (GM) rice, wheat, maize and castor for field trials during the upcoming Kharif season. Companies have to relocate their trials can only be conducted in consenting states as strong opposition to the clearance is being faced from various state governments.

Bayer Bioscience Limited has got open-ended clearance to test GM rice in all four regions of the country. Mayhco and BASF India Limited too have got the GEAC nod for trials of GM rice. The Hyderabad-based Directorate of Oilseeds Research's GM castor too has been re-approved for field trails. Monsanto India Limited has been allowed to test its GM maize. Mayhco has on the other hand been given an extended clearance for its trials of GM wheat.

Besides these food crops, the GEAC has also given the nod for further field testing of various GM cotton varieties by Bayer, BASF and Mayhco.



Nanoparticles from rice husks set for use in batteries

Rice farmers may soon have a more lucrative use for a common low-value byproduct: rice husks, the hard, protective coverings around the edible grains. The husks contain natural silicon nanoparticles that can easily be extracted and used in battery manufacture, a study shows.

Silicon nanomaterials have various industrial applications but they are complicated, costly and energy-intensive to produce. Meanwhile, 120 million tons of rice husks are produced as byproducts of rice agriculture worldwide each year. This technology can be particularly helpful to countries such as China where a large amount of rice husks are produced and the country also plays an important role in battery manufacturing.

Even though more research is required, farmers can earn additional income by selling the byproduct to companies that supply battery electrode material or chemical factories that could process the husks to derive the silicon for battery use.



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ACI Agribusinesses

Creating Wealth for Farmers

ACI Agribusinesses, the leading agriculture integrator in Bangladesh, is dedicated to gaining prosperity of Bangladesh through food security. ACI Agribusinesses offers complete solutions to farmers and also educates them about the technical know-how.