



ORIC MNS-UAM and ENTREPRENEURSHIP TO VENTILATING BEE HIVE

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Prof. Dr. Zulfiqar Ali is a proud scientist of this living world today. He is lucky enough to have a visionary Vice Chancellor mentor like Prof. Dr. Asif Ali a distinguished and world-class social and business entrepreneur. Office of Research Innovation and Commercialization ORIC of MNS University of Agriculture Multan is harvesting entrepreneurial activities within the campus and out of campus. ORIC MNS-University of Agriculture is proud enough to train hundreds of Youth from different Universities with the partnership of National and International institutions. ORIC is dealing and healing with large and small donors including Agriculture Volunteer Society for which undersigned is trying his best to provide financial assistance to students to create their own small Silicon Valley this little initiative is paving the way to let the young Entrepreneurs get training and have their own business. ORIC is proud enough to have seed funding for Young Entrepreneurs of MNS-UAM.



Dr. Zulfiqar Ali
(Director ORIC)



Beehive



Dr. Asif Ali
(V.C. MNSUAM)

Youth from MNS University of Agriculture is thickly connected with the Office of Research Innovation and Commercialization ORIC to participate in entrepreneurship festivals with their novel business ideas and after a rigorous competition, they get the award. ORIC is playing the role of Phoenix for Youth to let them hunt seed funding at the National level and have their own business. Prof. Dr. Zulfiqar Ali believes that as the son of soil Business Incubation Centre BIC established by ORIC is a blessing for young female Entrepreneurs where they can have their own business and funding too.

The Vice-Chancellor of the MNS-UAM believes in this that Youth must play a pivotal role in society. He is of the view that Youth must leave no stone unturned to fulfill responsibilities more decently. There is no iota of doubt that he is happy that ORIC under his solemnity is winning seed funding with lofty success. Prof. Dr. Asif Ali wants to see Pakistan's economy strong and stable by involving "Youth" the sheer part of our society.

VENTILATING BEEHIVE is a modified designed and superior workmanship Beehive than the simple box type, poorly built Hives, available in the country and this is an account of an interesting work towards creating such a hive. It started with the objective of promoting Honey Bee Keeping in Multan, but somehow, there were twists and turns, leading to entrepreneurship for development and marketing of a new Modified and superior workmanship Honey Beehive, which withstands the harsh, hot summer weather of the region.

With that, three high boxes practice is also incorporated, a first for the country, and which gives out more and better-quality honey than a single box.

The Honey Bee keeping promotion was started as a side income generation for students, and as a necessity for improving agriculture and fruits yield, in the region. Unlike any other business or ventures, where it needs people and machines to work, or in the case of cattle and chicken farming, which demand feeding, Honey Bee Keeping has no such requirement to employ machines, or people, or any feeding. The Honey Bees find their own food, and have no demand of any kind, and that's the reason behind the term, "worker Bees," which are there in tens of thousands

Looking back, the new exciting development was possible, because of the grit and dedication of few young students of the local Agriculture University, who did not want to quit on initial failures, and just kept going, and the university for providing the platform and environment of encouraging entrepreneurship among students, and for their objective of community service. I know all these, because of a small role, that I played through distant mentoring, a new innovation like Distant Learning, and other distant things.

Honey Bees are a very fascinating and amusing creation. I remember, as a young kid, seeing in amazement, Honey Beehives suspended and hanging at tree tops and not falling down. My second encounter of Honey Beehives was, again a long time back, during a Train ride from Istanbul to Germany, by that famous Orient Express Train, when passing through Greece and Bulgaria, I saw Honey Beehive Boxes, in the middle of fields, kept over raised supports. The Hives were many and everywhere, as if following the train. The third encounter stuck in my memory, was a documentary on Honey Bees, that I saw, years ago. In that, they showed a large Trailer being parked near an orchard in California, and the driver coming to open the Trailer's back gates. There, at that instant, as if on a cue, hundreds of thousands of Bees swarmed out, like a wave and just flew away. The Documentary told, that those Honey Bees were on a mission to pollinate the Almond Blossoms. Doing a little search, I find that those very little Honey Bees were responsible for Almonds growth, making it a big export worth more than \$ 4 Billion for the growers of California. Yes, Billions and not Million.

Coming back about the new Ventilating Hives development, it all started during one of my trips to the university, for a new initiative of mobilizing 'Agriculture Volunteers' and an entrepreneurship program for FRESH DRI, when a chance conversation with students, turned to Honey Bee Keeping. This concluded with a Rs.12,000 micro loan, to one student, to get started with Two Honey Beehives, on a simple term of returning the loan, if he makes money. The stake from the student was a commitment of honest dedicated work.

Easy said than done. The problem was, that there were no Hives available around Multan area. They didn't give up, found a lead through HBRI in Islamabad, and the student traveled some 160 Kilometers away by public transport, to a Bee keeper, got two Hives, brought back those Hives by public transport, and started his bee keeping. Come summer, and one of Hives Bees died. Meantime, two more students got interested, and whom, hives had to be arranged from Islamabad, at a higher rate of Rs. 10,000 each. Unfortunately, the new Hives, also did not fare well.

The failures became a challenge. The micro loans, though very small, could not be let go, for future creditability and standing. The students did not want to give up. The university did not want a failed start for promoting entrepreneurship among students, and none could stomach disappointment. There was a mutual understanding, that something needs to be done. All started consulting others, studying, and trying to find out, the reasons of very few Bee hives in the region. We found out, that most of the Bee Keeping and Hive

business was done by the people of North, hardworking, always on the move with their hives to North and South, chasing blossoms and flora. They move to escape the severe North cold, and get the benefit of early spring blossom of South. The constant moves of the hives, is probably the reason to keep the hives bare bones and simple, which served good enough for the cooler weather, the Bee Keepers were chasing.

The consensus was that the available simple hives were not suited to hot summers, and particularly, of Multan region. We had to come up with a modified Beehive. Multan summer ambient temperatures are high. Then, the tens of thousands Honey Bees in a box, also generate body heat, which raises the inside Beehive temperature even more because of the confined space of the simple box Beehive. That is good to keep the Honey Bees warm, in winters, but too bad for warm weather. That brought the idea of cross ventilation to take out the box heat, during summer. Air had to be brought in, from the bottom and taken out from above. There had to be space for air movement also. The roof had to be slanted, and a bit high, to take out the heat effectively. The boxes had to be painted white, to reflect sun heat. The students worked hard, going through the cycle of four carpenters, who could capture all the new details and give better workmanship. Then, we added boxes, a common practice with experiences Beekeepers in other parts of the world, but never tried out in Pakistan. The lower two boxes are called 'Brood boxes' for the Honey Bee Queen to lay eggs to keep creating replacement worker Honey Bees. Remember, that the life span of a Honey bee is about 50 days. The top most box is called 'Super', where we get only Honey, of higher quality, and the yield is also more.

The effort took more than Two years. It had slow start, but has now taken off. More students have started Bee keeping, and the older ones increasing their numbers. Now, they have turned their attention towards marketing of Beehives for the hobbyist and the farmers. They have teamed up, with a bee keeper in Jatoi for Queen bees and starting bee colonies, to make it convenient for new Beekeepers. There are plans for more services, like; honey extraction, marketing and earth cooling hive house. The potential is there for growth, if the group does not falter.

So, that is story of the new VENTILATING BEEHIVE. A modest example of entrepreneurship, but worth appreciation and encouragement, to the students' hard work and dedication.

Hats off to the university for the foresight of promoting entrepreneurship, and for the long-term community service. With more Honey Bees, there is bound to be increase in harvest, fruits and vegetables, as Workers Bees shall get busy in Pollination, and hopefully, one day this region could also be cited like the Almond growers of California. It also shows that distant mentoring is feasible, for those on the fringes.

About Writer

Arshad Jamil is based in New Jersey USA. He is an untiring friend of MNS University of Agriculture Multan, actively mentoring several groups of students. He knows several languages, and has been volunteering for HEC and universities in Pakistan since last 14 years.