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Kansas State University: Kansas Agriculture and Rural Leadership International Tours>Class IX Tour to India (2009)

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Thanks to the KARL Advance Team for arranging a great tour!

KARL International Study Tour to India

Monday March 16, 2009 - Scribe, Mike Spinden

The KARL Class IX and board delegation group converged on KCI about 1:40 to marshal our strength and get ready to suck it up and make the long journey in front of us. A few of us stopped along the way to enjoy one last protein hit, "Beef, It's What's for Dinner". After a short connecting flight to Chicago and a small layover we boarded American Airlines flight #292. We would be flying north, arcing over the Artic Circle on the direct flight to New Delhi. We were facing a 15 hour non-stop flight from Chicago, USA. Next stop INDIA.



March 18, 2009 - Scribe, Rob Sage

The KARL class was able to sleep in an extra hour to help fend off jet lag. We traveled by coach through Delhi to visit the headquarters of our tour coordinating firm, Assocom India. Assocom was also recently contracted with to recruit students to attend Kansas State University as undergraduate and graduate level International students. The organization had worked with many Indian's traveling to Kansas State for Grain Science seminars and American Institute of Baking short courses. We were the first group that Assocom had hosted coming from America for agrotourism.



We were treated like dignitaries upon arrival with the traditional red dot placed on the forhead of each KARL delegates and a wreath of marigolds placed over each neck. Tilak is a name of the ritual mark on the forehead. It can be put in many forms as a sign of blessing , greeting or auspiciousness. The tilak is usually made out of a red vermilion paste (kumkum) which is a mixture of turmeric, alum, iodine, camphor, etc. It can also be of a sandalwood paste (chandan) blended with musk.



The Tilak is applied on the spot between the brows which is considered the seat of latent wisdom and mental concentration, and is very important for worship.

The greeters, all ladies dressed in traditional clothing, said Namaste to each KARL delegate, which translates to, "Welcome – I see the divine in you". We were made quite welcome as we viewed the efficient office of the 15 employees of Assocom.



Jack declared five of Assocom's staff members "Honorary KARL Class Members" and presented each with a royal blue KARL shirt. They would each be our hosts for our two week trip. Assocom presented us with an agenda and itinerary for our 2 week tour of India and we each received a leather binder for the schedules. The Assocom and KARL logos were embossed on the binders. Our first Indian lunch was then provided and each class member enjoyed the culinary introduction.



During the afternoon we toured the Red Fort of India. The Red Fort is a major tourist attraction of India. It was built by Emperor Mughal Shahjahan in 1638 and was completed in 1948. It is the largest monument in Old Delhi. It's constructed of thick, red sandstone walls that range in hieght of thirty-three meters on the side facing the city and eighteen

meters on the backside facing the river. The fort was used for sports activities as well as government affairs. To this day the fort is in very good condition and is visited by tourists from all over the world.



We then visited the Muslim mosque, the Jama Masjid. Jama Masjid was built by the Mughal Emperor, Shah Jahan, between 1644 and 1658 and is the final architectural piece built by him. Situated in the ancient town of Old Delhi, this pride of the Mughals was built by five thousand artisans. The mosque stands on Bho Jhala, which is one of the old Mughal capital cities of Shahjahanbad. Originally called the Masjid-i-Jahanuma, or "mosque commanding view of the world", this magnificent structure is the largest and most exquisite mosque in India and is made up of alternate vertical strips of red sandstone and white marble.



Next we traveled to the Dilla Haat, a cultural showpiece of Indian arts and crafts. We were able to do our first shopping and boy did we shop. The ladies of Assocom helped our class, especially the women, barter for the best prices.

Our adventure was just beginning...

Thurs., March 19, 2009 - Scribe Notes by Fran Richmond

The day started with breakfast at the International Guest House, followed by a group discussion on first impressions of India. Responses included: the amount of people, poverty, lack of infrastructure, beauty of the country, historical context, diversity of the "haves" and "have-nots," cultural shock, and hospitality seen. On a lighter side, Scott Hesse commented on how big the rat was that he saw, to which Aaron Dunbar responded, "that's what the rat thought too."



The first stop for the KARL group was a meeting with officials of the India Agricultural Research Institute (IARI). Dr. S.A. Patil, Director, welcomed the class members and presented Jack with red roses. A brief history of the Institute was given, mentioning that it was originally established in 1905 at Pusa, aided by a generous donation from an American philanthropist, Mr. Henry Phipps. Following an earthquake in 1934, the Institute was moved to its present location in Delhi. In return, Jack presented a brief overview of the KARL program.



The Institute provides leadership in the development of agriculture research infrastructure and technologies that has led to India's emergence as a food-sufficient country. It was noted that India's food production has increased four times since becoming a republic. The Institute has been playing a key role in transforming agriculture research, education, and extension in India, and has been a harbinger of the Green Revolution. Expanding from its original five divisions, the Institute currently has a network of two divisions, nine research stations and two off season nurseries spread across the nation. Structure for the Institute was patterned after the Land-Grant system of the USA.

In a question/answer time, it was noted that the number of women students at the Institute was between 35 and 40 percent of the total, and that the number is increasing rapidly. Major Indian exports were rice, soybeans, coffee, tea, spices, and live cattle. A large farm would be approximately 10 hectors. The current trend is for young people not to remain in farming, but to seek occupations in business management, medicine and engineering in the cities.



The KARL delegation then toured the Institute's research farms and greenhouses. Research is being done on producing crops in the hot summer months, free of costly pesticides by growing crops under nets which shield the sun and protect from insects. Refreshments of juice from the bael fruit, aonla (Indian gooseberry) and jamun (blackberry) were offered.

Lunch was enjoyed at a Chinese Restaurant, Malcha Marg, Chanakya Puri, New Delhi.



The delegation was then welcomed at the U.S. Embassy by Ms. Holly Higgins, Counselor for Agricultural Affairs. She explained that much of her work was focused on trade relations and encouraging two way trade. Currently there is a trade imbalance with the United States. India has roughly the same tillage acre as the U.S. Half of the population of India lives in villages and rural areas. There is, however, much off farm employment. Usually farmers can double crop in a twelve month period because of the long growing season. One third of the crops are irrigated and two thirds receive water from the monsoon. Finally, it was noted that the KARL delegation was the largest group that has ever met in the meeting room at the U.S. Embassy.



Next the delegation traveled to the Indian International Center for an interactive session on "Agriculture, Education, and Processing." Presentations were given on various topics by Jack Lindquist, President, KARL; Dr. Sajid Alavi, Asst. Professor, K-State Grain Science Dept.; Dr. P.E. Vijay Anand, Technical Director, Feed, ASA, International Marketing; Dr. Nepal Singh;, Consultant, ASA, International Marketing; Mr. Amit Rana, Vice Chairman, Delhi Public School, Panipat; and Mr. M. Vasudeva, Adani Agri Logistics Ltd.



It was voiced that there must be a strong partnership between the public and private sectors. With strong growth expected in the Indian market, the human factor will be important, as well as position in the global market. Consumers are looking for foods and ingredients that will help ease and improve health conditions. India has 4 percent of the water resources in the world and 16 percent of the population, with approximately 1 billion people. India is the largest producer of sugercane, milk, coconut, spice and cashews. Following the presentations, an evening meal was held outside, with opportunities to

continue conversations with the Indian hosts, before returning the International Guest House.

Friday March 20, 2009 – Scribe, Trevor McKeeman

David Govert (our scheduled Chair for the day) was with the class during every step of our trip in India - even though he happened to be in Kansas.

New Delhi India

After a night of K-9 serenading, an early morning wake up was greeted by an ice cold shower. An informal survey conducted later in the day indicated that about half of the class IX rooms had hot water in the International Guest House in New Delhi. The hotel, itself, was a beautiful structure and it was easy to imagine how it must have been a first-class building earlier in its history. Like so many structures in India it was difficult to determine the age of the hotel as buildings seem to deteriorate at a faster rate on this subcontinent.

While still in a morning haze, Kirby and I watched in disbelief as a popular Indian singer danced "the worm" across our television screen in a cutting edge music video. This was to be a sharp contrast to the traditional Indian dancing that we would see later in the day.

Walking to the bus we greeted by Susan who had spent some time alone in an elevator stuck between floors. This was the first of two "elevator incidents" for Susan and I am convinced she could have a tremendous career as an elevator safety inspector.

There was a lively discussion on the bus ride and just driving through and out of Delhi was an amazing, eye-opening experience. Our bus load of tourist did not go unrecognized either in the crowded traffic of the city where our bus competed with, cars, motorcycles, scooters, auto-rickshaws, bicycle-rickshaws, tractors, pedestrians, and cattle pulling wooden carts transporting rebar. It was as if several centuries of transportation were all competing for the same limited roadway. Our bus passed numerous power plants and factories, signs of a rapidly developing industrial base. We crossed over rivers that carried the burden of this growth at high environmental cost, and experienced a toll stop that must have lasted 25 minutes – certainly not the K-TAG. It was fascinating to see tarp dwellings immediately adjacent to middle-class concrete homes with tall fences, again next to thatch huts. Common sites were cattle in the streets sometimes grazing on litter, unending lines of local shops about the size of a garage stall, and people everywhere, most of whom had bright smiles while looking at the tourists.



All this was a stark contrast to what we saw as we entered the gates of the Delhi Public School near Haryana (actually it is an affluent private school). Litter was replaced by meticulously groomed landscaping. The busy sounds of traffic and honking (used in place of rearview mirrors) were shielded by tall walls. The new building with marble floors, ionic pillars, guards in uniform, students dressed in brightly colored traditional dresses dispersing leis to each member of the KARL group - just seemed to be an oasis.

As we entered the interior of the school we were greeted by students lined up wearing white standard uniforms who said "good morning sir, good morning madam." We were directed to an outdoor stage and giant sun shelter that had been constructed just for our visit. A majority of the student body was already waiting for us under this shelter and our seats were couches on the front row. The hospitality and welcome shown for the KARL group at this

school (and throughout India) was nothing short of incredible. The principal, Ms. Seema Bhatnagar, addressed our group and welcomed us to the school – from the beginning it was easy to see that we were witnessing a top-tier school, management, and curriculum in India.





A series of traditional dances ensued with brightly colored outfits. A more western style band with guitar and drums accompanies a choir which sang "This is the life - this is the dream."

Jack was asked to speak and emphasized the importance of traveling to other parts of the world and the constant quest for learning. There was more dancing and the entire program was impressive. At one point I couldn't help but write - This is a beautiful and ancient culture more complex than anything I could have imagined.



The Vice Chairman of the school addressed the crowd on the topic of public/private partnerships. He was a well traveled, polished man who carried himself with dignity. You could see the pride he had in what they had accomplished at this new school. India is a land of extremes and unbelievable diversity in language, religion, and customs. My notes also read - This country has tremendous potential - if it can be organized and truly harness the extreme intellect of its people.

Breakfast at the school was at a more moderate spice level and included a muffin that tasted like angel food cake and a breaded chicken cutlet which I ate with my hands. Maris pointed out my shameful departure from silverware and Kirby doubted how long I would last in an institution of this caliber. Several were in agreement that after a few days in India, cafeteria food never tasted so good.

After breakfast the class was broken into groups of around four and we were personally escorted by a student and teacher around the campus. Immediately we could see the emphasis that the school placed on physical exercise and health. Something that seems to be vanishing in a budget constrained U.S. educational system. There was a dedicated rollerblading arena (one of the more popular sports), tennis, volleyball, soccer, yoga, and a swimming pool. Kirby and I played a quick volley of doubles ping pong with some middle school age students and we were totally schooled. We vowed to practice more and return to India for a victorious rematch.

When it came time for our group to participate in Tai Quan Do kickboxing it was Brooks and Joe's turn, but both chickened out after watching students deliver precise blows to well padded instructors. There was horseback riding with "Indian breed horses," and we met the basketball instructor who said he had coached Michael Jordan. Kirby made up for his

humble ping pong performance with a long hit of the cricket ball into the brick fence topped with barbwire. Maris smashed it over the fence to the joy of the students. We visited a dance class that meets twice a week and several class IX members showed off their "moves."

The educational system, like everything else in India, is competitive. None of these sporting activities were purely recreational. Students had to choose (and compete for positions) in each of the sports and they would remain with that sport for the entire year, aggressively competing with other schools. To say students are pushed to excel is an understatement. There appears to be no coddling of underperformers in India, and students are keenly aware that they are not just competing academically with a very large domestic population, but with their generation from around the world. Again, this was a valuable understanding to take back to the west. When I asked our student guide how much homework she typically had to complete at night she responded with "not very much - probably just two hours."

The concept of a globalized economy was integrated into almost every aspect of the curriculum. We visited classrooms where students were studying Japanese culture through, food, art, language, and a designated "story telling" class. There was a noticeable absence of technology, including computers, but the curriculum integration of foreign cultures was top-notch.

After the tour the KARL group, teachers, administrators, and local media all met for a question and answer session. The educators sat on one side of the marble-like floored conference room and the KARL group on the other side. It was truly the meeting of two very different cultures. The teachers begin firing prepared questions toward individual members of the class. We had a chance to ask questions as well. Our student guide during the tour had said something very interesting to me. She said, "My parents want me to be a doctor...but I don't want to be a doctor." Indeed almost every student there seemed to indicate they were expected to become either doctors or engineers. I asked the school Vice Chairman about this and wondered how a population of 1.3 billion could support jobs for that many engineers and doctors. When I asked about entrepreneurship as a job creator, his response was "we do tend to focus on medicine and engineering - that's what parents seem to demand, there is probably value to look at other disciplines."

Most of us left the school very impressed but as our bus pulled out of the gate, I saw a young, school age boy in the field picking weeds (clearly not attending class) and was reminded of the extremes of wealth, class, and education in India.

Back on the bus the honking began again and as we passed mile after mile of people lined up along the road in 10 foot, or less, increments - it was hard not to think about the environmental and societal challenges that population growth will bring to India and the rest of the world. In the next few decades the Indian population will be dominated by 20-30 year-olds. It is imperative that these young people have access to work and prosperity to prevent social disorder. I suspect this is the case in many developing countries.

After lunch the KARL group met with Mr. R.P. Vaishya, Director of Micro Small and Medium Enterprises and a number of other economic development leaders. They discussed the local industries of Haryana and how its proximity to New Delhi affected industrial growth. 40% of the economy was attributed to a value add processes, second only to production agriculture. Haryana had originally been part of a broader Punjab region which had been broken up into 29 districts in 1966.

The group indicated the most significant hurdle for economic development was to find capital for plant and equipment infrastructure - needless to say labor was not a constraining factor. This government sponsored agency makes loans available up to \$50,000 for micro businesses, and \$2 million for large enterprises. As India unwinds years of socialistic policies, it was difficult to ascertain where the lines were drawn between private enterprise, entrepreneurial activities, and social government agendas. Many of the challenges they presented for small business startups were universal to the hurdles in the U.S. The region is pushing the advancement of technology including barcodes and ISO certifications through subsidies.

They also believe economic development is, in large part, a business information dissemination process. There are three to six week entrepreneurship training programs and

conversations about leveraging clustered industries similar to those conversations in the U.S. Major industries in the region included textiles (of which some companies are moving to cheaper wage countries), rice, automobiles, engineering services, software, and agriculture equipment. A significant national focus for India will be the greater development of food processing infrastructure.



Several members of the KARL group were asked to describe activities in Kansas including some wheat farmers of the class including Froebe, Gerdes, Kalb, and Kells. Sajid and Vincent talked about K-State and economics. Jack and Rob described Kansas and the KARL program and I gave an overview of some commercialization practices taking place in Kansas.

After the meeting we checked into the Hotel Jewel's in Haryana and had dinner. Several members of the class were beginning to experience the ravages of unfamiliar food and unaccustomed immune systems. Joe seemed to have taken the brunt of what would hit most of us at some level. Despite this, there was a consensus within the group that we had been given a tremendous opportunity to experience worlds completely foreign to many Americans. You can't travel to India without it changing you in some way and we greatly appreciate the KARL board and their vision for this international exposure.

Day 4, Saturday, March 21, 2009 - Scribe Mark Maris

Day 4 of the KARL Agricultural tour of India began with a visit and tour of the National Dairy Research Institute (NDRI) in Karnal, Haryana. We were welcomed by Dr. A.K. Srivastava who is the Director and Vice-Chancellor of NDRI. NDRI is a four (4) year course that serves up to 40 students per year from all over the world. It moved to its present location in Karnal in 1955. There are fourteen (14) discipiles in their Doctorate Program.



Dr. Srivastava explained the Indian Dairy Industry to us in detail and it was interesting for this writer to note that the Buffalo is their major milk producer. There exists an estimated 98,000,000 head (57% of the worlds population!) in India and they produce a nominal 55% of all the milk. Recently at NDRI they cloned the first Buffalo calf in the world. All milk in India is priced on a national pricing system which moves very rarely. Only 20% of India milk goes thru processing channels.



We later toured the entire campus of NDRI which included the Agricultural Technology Information Centre, Animal Biotechnology Centre, Experimental Dairy, Feed Areas, and ended at their Modern Dairy Plant where we got scolded by Jack for requesting a sample of their ice cream which put us behind on a very tight schedule!

We proceeded to load up our tour bus and headed to visit a Sikh Temple near Village Bodahhai Kalan. Upon arrival there we were put thru a Sikh like religious ceremony making many of us wonder if we needed to get re-baptized when we got back to America!







From the Sikh temple we moved on to visit Mr. Jagdeep Singh Cheema's Soy Milk Factory. Although very small by American Production standards it was interesting to learn of all the products that are generated out of this facility.

The evening ended (well actually it ended the next morning when we got to PAU around 3 a.m.) at a Punjabi Folk Music ceremony. Things got just a little carried away and before you knew it the GodFather had a firm grip on us and we were all doing the American version of the Punjabi shuffle. A great time was had by all and it was definitely one of the highlights of our trip. (hint: Josh Jennings and......."I think I'm dancin' with a man" J)



Day 5, Sunday, March 22. 2009 - Scribe, Frank Male

My job as scribe started early @ 12:01 am we were still at the reception provided by Mr. Jagdeep Singh Cheema at his beautiful home. We enjoyed native folk music & dancing, and I believe there are photo's circulating which display our dancing prowess. A good time was had by all.

Our nights stay was at the college dorms of Punjab Agriculture University (PAU). Our accommodations were functional with one small twin bed, 1 chair & a water heater in the bathroom that you turned on 20 minutes before your shower so you could have warm water! Our doors had pad locks on the outside for security! Thankfully no one was pranked & locked in their room from the outside!

Breakfast started @ 6:30 & consisted of toast, a jelly sandwich, hard boiled eggs, tea, coffee, and water. We were on the busses @ 7:30 with people rotating thru the "short bus" also know as the infirmary.



We arrived at Adani Agri Logistics in Moga around 11:00. This area reminded me of central Kansas. It is flat as a table top with lots of wheat fields ringed with mature trees. In fact the states of Punjab & Hiryana are the bread basket for India & produce by far the majority of the wheat. What we found is a state of the art wheat handling facility consisting of 28 large steel bins. This is quite a break from the traditional methods of grain handling & marketing which consist of sacking the wheat in gunny sacks, storing in stacks outside with a tarp

cover, and selling thru middle men who buy the grain at a discount for their trouble. Needless to say spoilage & logistics are major problems. The wheat price is fixed once a year by the Indian government. Currently, with the various conversions figured in the price is equivalent to \$6/ bushel. The facility is comparable to anything found in the U.S. They sample each load in 4 locations as they come in, testing for dockage, moisture, etc. Less than 1% of loads are rejected for quality reasons. The loads are weighed and the wagons are directed to the unloading facility. This facility has 10 bays to unload trucks & tractors pulling wagons. Each bay is equipped with a hydraulic hoist to lift the truck or wagon if it is not equipped to dump. This facilities trade area is 50 kilometers or 30 miles. As a landscaper I was amazed that all the driveways at the elevator were clay pavers & not concrete or asphalt pavement. It just goes to show that labor is plentiful & cheap. The bins were equipped with ventilation fans & temperature probes like found in the U.S. The load out facility is set up for 50 car unit trains, each car holding 60 tons and can be loaded in 5 minutes.



We had the opportunity to have a question and answer session with area farmers about wheat production. It was an exciting exchange with our agronomists thrilled with the chance to compare practices. The group told us that the average farm was 6 acres in size, the average yield was 35 to 40 bushels per acre, that combines are now common place, and that no till is the next big innovation. Refreshments followed...

Our next stop was Bonn Nutrients a diversified bakery. Once again the landscaping inside the gates was breathtaking. A real landscapers paradise, but I digress...

After donning hair nets & throw away smocks we toured the snack cake factory where we witnessed giant Hobart mixers stirring the batter then workers hand loading pans with batter, which were loaded by hand on to racks that are pushed into ovens that rotate the racks as they bake. Afterwards they are unloaded, frosted by hand then packaged for shipment. In the next building was the cookie factory. All the ingredients are stored on the main floor.

The ingredients are sent pneumatically to the 2nd floor where they are thoroughly mixed, rolled out flat on a conveyer belt, sent through a cutting die to make the size & patterns desired for the cookies. As the cookie dough traveled down the conveyer it was though the oven next followed by the cooling racks and the packaging station where the cookies where sorted & stacked by hand & then packaged. Bonn Nutrients was recently awarded a contract by WalMart to supply their branded cookies!



The next building we visited was the bread factory. Again it all started with giant Hobart

mixers with ingredients hand loaded. Once the mixing was complete a machine measured out the dough into rolls, two workers then picked up each roll, twisted them on them and placed them into the baking pans. The next step involved the bread being proofed, then baked in a giant continuous oven. Once exiting the oven the bread is picked from the baking pans with pneumatic fingers and placed on a conveyer to cool before being sliced & packaged by hand. Bonn bakes over 300,000 loaves of bread every day! As is the tradition in India a reception followed with pictures taken and gifts exchanged.

Our next stop was familiar territory at Punjab Agricultural University, (PAU) and its history museum. We viewed everything from a gypsy wagon to a camel saddle!, ancient pottery, musical instruments and replicas of clothing. It really helped put things in perspective.



The evenings program was given by the Vice Chancellor of PAU Dr. Khan and Dr. Nirmal Jaura. Dr. Jaura is a former Cargill plant geneticist working on sugar cane, sorghum & corn in the USA. His observation was that improved plant varieties generally have a useful life of 5 to 10 years. In his travels he has even visited Manhattan Kansas & KSU! It really is a small world.

Various department heads visited with us about the issues that concern them and their missions at PAU. Familiar themes emerged, worry about falling water tables, soil fertility concerns and new emerging pests. A strong extension program is used to take the research from PAU to the farmers & show them the best practices available to ensure their continued success on the farms.

Dinner & refreshments followed the program, with the various department heads at each table so we could learn from them on a more informal level.

After another intense day of learning it was off to the dorms for some much needed rest.

Monday, March 23 Scribe Notes by Jackie Lopez



On Monday, we started out the day early (6:30 a.m.) and checked out of the PAU guesthouse. Our destination was Jalandhar, but on the way we stopped at a rest area to meet Jasbinder Singh (and to stretch a bit). By 8:30 a.m., we arrived at Satnam Agro - a potato processing plant and were given a tour of the facility. Potatoes are the main product processed at the facility, but they will also process rice when it is rainy. The potato facility was comprised of three lines - french fries, potato flakes and vegetable oil. McCain is the plant's number one customer. They are a co-packer and sell the product within India. The facility produces 22 metric tons of potato products/day and is in operation for 10 months of

the year. Discarded product from the plant is used for cattle feed.

We were able to view an experimental potato section of the plant where they were studying tubors from three corners of India - north, central and south - and analyze how climate affects the potato crop. It was also shared that the facility has a 20 hour power supply and uses two generators for the other four hours. The Punjab region is the major rice grower for the plant. The French fry product is exported to the United States, Argentina, Mexico and Canada. Workers at this facility are paid 200 Rupees or \$4/day.



The KARL team was served breakfast at the plant. The group was excited as there were a few dishes similar to American ones that were on the menu namely chicken sausages and hash browns (Kirby even cried as he ate the food).



Later, we boarded the bus and went to the home of Jasbinder Singh. The Singh's were gracious hosts and gave us a tour of their beautiful home and fed us a wonderful meal. We met several members of his family and some in the group even played soccer in the front yard with the kids. Later, we sang Happy Birthday to Mrs. Singh and enjoyed chocolate cake. After leaving Mr. Singh's home, we briefly stopped to see a field of sunflowers and a wheat field. It was beautiful wheat and made everyone in the group feel a little closer to home.



Following the wheat field tour, we all boarded the buses again and made a long trek up the mountains to Palampur. It was an eight hour bus ride and was quite exciting as we twisted and turned around many roads to go up the mountain. The country was beautiful and quite different from home as we viewed monkeys and mountain goats along the side of the road. Upon arrival, we checked into the Hotel Tea-Bud and had dinner.

Day 7 - Tuesday, March 24th, 2009 - Scribe, Katie Kueser



We started the day off at the Hotel Tea Bud in Palampur, Himachal Pradesh. Breakfast was served and everyone was very glad to have plain toast, eggs, and oatmeal on the menu.



After breakfast we loaded up the bus and traveled the short distance to Chaudhary Sarwan Kumar Himachal Pradesh Krishi Viswavidhyalaya (CSKHPKV). There we were greeted by the university staff and we proceeded into the conference room where we were privileged to have the Vice Chancellor, Dr. Tej Partap speak to our group about the history and future of CSK- Himachal Pradesh Agriculture University. Vice Chancellor Partap explained how the university is beginning to transform and the government of India is challenging universities to retain their best talent. He explained that the school was established in 1966 and expanded in 1978. There are four colleges within the university: college of agriculture, college of veterinary and animal sciences, college of home sciences, and college of basic sciences. CSKHPKV also has a very active research and extension service that works for the betterment of the agriculture industry in Himachal Pradesh. Dr. Partap also said that the university was very interested in doing student and school exchanges with fellow Kansans!! Vice Chancellor Partap explained that the university is very strong in their research and extension program and that most of the research is related not only to developing new technologies but also to the economics of growing certain crops. He felt that the extension service would have to provide more economic information to keep thriving into the future. He went on to explain that due to intervention by the state government in social development that much progress has been made. The state focused on improving roads to the innermountain regions as well as developing a marketing infrastructure for the state's agriculture products. Dr. Partap went on to say that "small is beautiful" and that the state of Himachal Pradesh has made many important advancements to secure its future.



After our visit with R. Partap we proceeded to tour the university. Our first stop was the horticulture farm where we were led by Dr. S.C. Sharma the director or research for the university. The university sits on 950 hectors of land and approximately 18% of that is irrigated. The average annual rainfall for the area is 1150mm and there are FOUR agro climate zones in Himachal Pradesh. Dr. Sharma said that most of their research and extension is agro-climate based. The university has helped to develop 110 varieties of crops that can be grown in HP. The average farm size is approximately one acre and the average income is \$1,000 - \$2,000 per year. Organic farming has also become very big in the state due to cultural influence and costliness of the newer technologies.



Dr. Sharma explained that in the state of Himachal Pradesh that they are unable to grow much corn or wheat so they must focus on other commodities. In the state there is a large emphasis on horticulture development and some of the produce they grow are apples, kiwi, pomegranate, tomato, strawberry, grapes, nectarine, walnut, peach, and recently they introduced blueberries and pears. HP is known as the apple state of India and the extension service is focused on this niche. The university grows starter apple trees and then supplies them to the farmers of the state. Through research they found that by angling the apple tree stems by 45degrees the plant will yield 6-7 plants and not just one. The university supplies 25 different varieties of apple seedlings to area farmers. The extensive horticulture department also provides a wonderful learning environment for students. There are also many greenhouses used on campus to protect and grow the apple seedlings along with other fruit varieties. A highlight of the horticulture tour was getting to sample some fresh strawberries which are considered a delicacy!!!



Our next stop on the university tour was to the Natural Grassland Management sight. The purpose of the sight was to improve the pasture lands of the state. Currently, many of the grazable acres are being overrun by weeds such as lantana, argeratun, chromelanea and didens. It is estimated that noxious weeds decrease production by 90% is some areas. The average stocking rate in the Himachal Pradesh is 0.3 hectors per animal. The research and extension team has run several trial and found that by applying a glyphosate based chemical and mechanical cultivation that per hector stocking rate was improved by .2 animals per hector. The extension service also provides local ranchers with seedlings of grass for improved production and variety. It was amazing to see the similarities between the challenges and solutions that they experience in pasture land improvement and it was a stop that many of our Kansas ranchers could relate to.





The Animal Science unit was our next stop on our tour. We were greeted and given a traditional Himachal Pradesh woolen hat! Everyone looked stellar and group pictures were taken with our new favorite head gear! The focus of the animal science department is also based in research, teaching, and extension. Some of the products that the university formulates and distributes to local ranchers are different feed products, mineral blocks (also called "cow chocolate"), dog biscuits, milk replacer, and a complete feed block for dairy cattle. The cost for a 15kg block of mineral was 25 rupees. The animal science department was also excited to have its newly installed hammer mill and a compressor machine for mineral blocks. They are also soon branching out into the aquaculture market and bringing in a pellet mill from Kansas to produce pelletized feed for trout. The department also distributes the feed that it makes to other research centers in the state for producers to pick up.

After our completion of the university tour we went to the newly opened international guest house for lunch. Lunch was a variety of traditional Indian cuisine.



Our last and final stop on our tour of CSKHPKV was the Department of Tea Husbandry and Technology. This natural and organic tea processing plant is university owned and run. The plant currently manufactures 15,000 kg of tea yearly but hopes to expand that to 30,000kg soon. After taking a scenic walk through the tea fields we toured the tea processing facility. On our walk we learn that a tea plant can live and produce for 150 with proper care and that the tea leaves are picked by hand. The leaves must be picked within 7 days of their prime or the end product will not be any good.



The first step after the harvesting of the tea leaves is the withering phase. The leaves come into the facility and are placed into the withering troughs where they are allowed to dry for 16-18 hours or to about 40% moisture content. This process allows the flavor and aroma of the tea to be formed. Following the withering process the tea leaves are moved via a trap door in the floor to rolling unit. The leaves are then rolled to break the leaf. During this process the juices come into contact with the leaf and reacts with the natural enzymes. The flavor of the tea is dependent on the amount of pressure during the rolling process. After the tea is rolled it moves into the fermentation room where it is placed on raised beds for 2hrs and 15minutes. During this time the room will be kept at a constant 23-24degrees Celsius. and 70% humidity. The leaves change color during this process. On completion of the fermentation process the leaves go through a drying chamber that reaches a temperature of 95-105 degree Celsius. After drying the tea is graded and then packaged. The grading system is based on leaf size and is done by a mechanical sieve. The cost to produce 1kg of tea is roughly 120-125 rupees and they sell it for roughly 330 rupees/kg.

The highlight of the tea tour was when we were all given our own box of tea to take home and try. The Dhauladhar tea is certified organic and comes with strict preparation instructions. To prepare the tea:

- 1. Boil desired amount of water
- 2. put tea leaves in water (1/2 t tea leaves per cup)
- 3. Leave the tea leaves in the pot for four minutes
- 4. strain the leaves out
- 5. Optional to add honey and enjoy

It was also mentioned that you can also just pour the hot water over the tea leaves and it is recommended to cover the pot for maximum flavor!

For more information or to order more tea contact Dr. Sharma at dr@hillagric.ernet.in

The afternoon was open for us to finally enjoy some of the beautiful city of Palampur. Many of the KARL class went shopping in town for local handicrafts and interaction with the locals. However, back at the hotel tea bud Sajid taught several members of the class how to play cricket. Cricket bat ...500 rupees, cricket balls.....100 rupees, one broken window at the Hotel Tea Bud....1000 rupees....a bunch of Kansans playing cricket at the base of the Himalayas in India ...

....PRICELESS!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!



Our final experience on day 7 of our trip to India was a fantastic presentation by Vice Chancellor Partap at the Hotel Tea Bud. Chancellor's presentation was on the state of Himachal Pradesh and why it has been so successful in the past. There are 6.1 million people in the state and Dr. Partap described it as "the best place to live in India". Dr. Partap went on to explain that it is socially one of the most progressive states and it is the only state combining a high level of social development with a high level of social equality. He stated that 92% of the people are living above the poverty line and that almost every child is enrolled in school. In addition, 80% of all villages get piped water and have LP gas connections. He also said that they don't have a big problem with beggars because if they come to the state they will put them to work! Dr. Partap said that all of this progress has been made by cutting across political parties and government policies have trickled down to the people therefore people have an increased degree of innocence, honesty, and commitment to the community. This has lead the state to have a good match of political will and community participation which directly relates to its 2nd or 3rd ranking for peaceful living in India. The state truly is a working example of how to socially transform a state in one generation. The key too much of this transformation has been the improvement of their roads system. Last year H.P. exported over \$200 million in fruits and vegetables to the USA. There are over 17,000 villages and 99% of the population is rural. There are also 10.508 primary schools in the state. Wheat is a major food crop and hydro power is a major power source in Himachal. With the state being comprised mostly of mountains, much of the land is terraced and they are growing fruit trees on some very steep slopes of the mountain regions. This provides a livelihood and income for many rural residents. Another reason for the fast paced transformation of the Indian state of Himachal Pradesh as Dr. Partap describes it is the focus of education, especially for females. Currently, 7.3% of

the state's expenditures are for education and more and more women are coming to the university for an education in agriculture. The state government has recognized the importance of agriculture to their economy and have intervened and aided in the marketing of their agriculture commodities. The university is present everywhere throughout the state and through its research and extension service, marketing support and infrastructure. Dr. Partap concluded his presentation by reminding us that the state of Himachal Pradesh has everything from "maize to lavender"!!!



Concluding our evening was our meal at the Hotel Tea Bud and was one again traditional Indian cuisine.

Wednesday, March 25, 2009 - Scribe Notes by Nathan Kells

We awoke after the first thunderstorm experienced on our trip. The lightening and wind were pretty bad, especially for those on the top floor wondering if the tin roof was going to hold!

After loading up in the light rain, we said farewell to Hotel Tea-Bud and Palampur and loaded the bus for what looked like anther long day on the road. We were not disappointed in that regard. After traveling the roads in India, be they mountain roads or straight, we all have taken away a greater appreciation for our well maintained, wide, safe and unpopulated roads here in the U.S.A.

After traversing some of the narrowest mountain roads we would experience on our journey, we arrived at Dharamsala, home to the famous Dalai Lama, the official leader of the Tibetan government in exile, the Central Tibetan Administration (CTA). It is believed the Dalai Lama is the current incarnation of a long line of Tulkus, or Buddhist Masters, who have become exempt from the wheel of death and rebirth. His name means "Ocean Teacher" or a teacher who is spiritually deep as the ocean. He and many of his followers sought safety here in India from The People's Republic of China in 1959 when they occupied Tibet.

Here at Dharamsala in the foothills of the Himalayas, we encountered heavier rain and needed jackets and umbrellas for the first time on the trip. For those of us without, umbrella's and sweaters were a bargain for a few rupees.



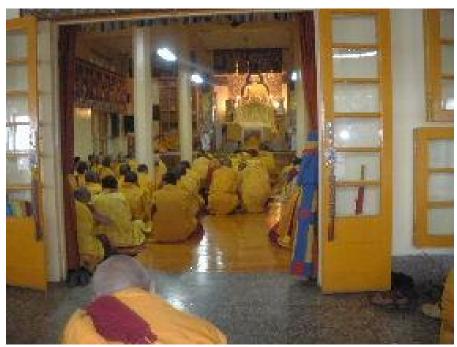
As we walked through the narrow streets in search of the Buddhist temple and the Dalai Lama's residence, we eyed many jewelry and other stores. Upon arriving at the temple, it was sort of a surreal experience. Everyone has heard of the Dalai Lama, and being there seeing all the Buddhist Monks and Nuns (Male and Female) all dressed the same, waiting to

get their turn to pray in the main teaching room of the temple, is a memory that few of us will ever forget.



We were surprised at the access that was allowed to all of us. Other than the main prayer area, you could wander around quite a bit of the temple, and even enter a different section of the main temple, open to others besides the monks. We were required to enter through a metal detector at the base of the temple, but the security was very lax. Some could just walk around the checkpoint.

I also began talking to a couple from Tibet, sitting outside the inner temple who said one of their sons was training to become a priest here at the temple, while other another son was in the U.S.A., and was actually in the Army dispatched to Iraq! Small world! They were very thankful for the presence of U.S. Troops in that part of the world.



After soaking in as much of the temple as time allowed, we began the shopping experience back towards the bus. As it turned out, the Dalai Lama is quite the economic developer! Probably not intended, but this small mountain town was sure cashing in on all the pilgrims and tourist. They did have the best selection of jewelry, a lot of it hand made, that we found on our trip. Many wished they would have had more time to shop.

Finally back on the bus, we started our descent from the mountains and were making pretty good time until we came upon a traffic jam, with stalled traffic as far as we could see around the bend. After pilling out of the bus to stretch and watch the monkeys, a few headed down the road to see what they could find. Before they got very far, things started to move. As it turned out there was car wreck that was only allowing one lane traffic to move, right before a one lane bridge over a gorge. We were lucky to be on the side that was being allowed to proceed and only lost about 20 or 30 min travel time.



We finally arrived at the Hotel River View for Lunch running late. But, as was the case in many instances, still had to wait on the food to be ready.

Loading the bus for another long afternoon on the road, we began passing around the mic, talking about some of the things that had made the biggest impressions on us since we had been there. I will list several of the most mentioned things below with a short note about them

Vice Chancellor Dr. Tej Pratap of Himachal Pradesh University: Very bright, articulate, well traveled man who shared many ideas about government and people most of us agreed with. Street shopping in "small town": Another fun time interacting with the crowd, away from the main tourist areas.

Scott Hess' Day: Our resident Lawyer, Scott, found the local Bar association and filled us in on there legal system. The biggest difference being that the judge decides the cases, not a jury.

Tea plantation Visit: Something you don't see in Kansas everyday! Tea plants, being picked by hand and a tour of the tea processing center.

Mountain Side Apples: Mentioned by Dr Tej, They have hollowed out holes in the side of the mountains which looked like solid rock and planted apple trees. The business was thriving. Himalayas: Very majestic views observed while in Palampur.



That evening we checked into the Hotel Chandigarh Beckons, which was run by the Institute of Hotel Management. They had prepared another traditional, Bhangra Dance, to entertain

us while mixing in some modern club music. They do like there music loud! On the floor above I could feel the floor shaking from the beat of the music!



Also present where several different people from different industries and also two reporters from the press. I talked to one man who ran an industrial Gas company and also produced light fixtures for Phillips.



Some turned in early, but quite a few stayed up and partied with the dancers until wee hours of the morning. Or so I was told!

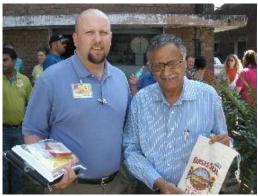
Thursday, March 26, 2009 - Day 9 Scribe Notes By Stephen Kalb



Our morning started just like the rest with a healthy breakfast and excellent service provided once again by the students of the Chandigrah Institute of Hotel Management and Catering. We have started to become quite used to being waited on and never having an empty glass or a dirty plate in front of us. Following breakfast we took a quick tour of the teaching facilities of the Chandigrah Institute of Hotel Management and Catering.



Mr. T. K. Razdan, acting principal of the college lead our tour of the facility which is 33 years old and consists of a three year program with total of nearly 350 students in the college. The first year is basic kitchen training that includes skills like chopping, cutting and boiling. The second year of school focus's on preparing meals in bulk for large groups. The final year prepares students for their specific application weather it is in baking, management or any of the other specific diplomas that the school offers. We toured the individual classrooms that consisted of baking labs, both large and small preparation class rooms, a dinning room where service skills are learned and tested, and some of the colleges' storage rooms. Everyday the college prepares 15,000 meals that are delivered to local government schools for those students that are unable to afford their own meal. This is part of the college's preparation for bulk meal cooking. Other highlights of the school include that one-third of their students are female and the institute has nearly a 100% success rate of placing students with a job opportunity after graduation from the program.



Our second stop of the morning was the Kapoor Brothers Roller Flour Mill where we were visited with Mr. Vinod Kapoor, one of the owners of the mill. Mr. Kapoor gave us a brief history about the mill as well as explained how they purchase their wheat from the government. Mr. Kapoor's mill is a 'roller flour mill.' Only 15% of the wheat in India is processed by a roller mill where as the remainder is processed by the old stone mill. A roller mill is greatly more efficient in producing flour at a more consistent level. Mr. Kapoor explained how wheat was purchased from the government, but since the price of global wheat was high last year, wheat millers were shying away from purchasing wheat until the government lowers the price. This makes the government purchase the wheat from the producer at a high price, then hold it until it can sell it to the miller often times at a lower price. Next we took a quick tour of the running mill. All wheat comes into the facility in 50 kg bags, and the flour and Atta leave the facility in 50 kg bags. We got to see the different roller mills running and what the product looked like after each stage. Finally we got to see the manual bagging of the flour and Atta. Our tour concluded with tea and snacks before we said thank you to the Kapoor Brothers.

From here we took bus back to Delhi stopping for lunch. As we got closer to Delhi as exciting rumor started to filter through the bus. It was heard that Delhi had what was known to us as a Pizza Hut, and if located, we might be having supper there. As we arrived at our stop for the night, Hotel Southern in Delhi, we were greeted by courteous staff of the hotel.

A quick change of clothes and the exchange to more Rupees found the group ready to head for the market to do a little more shopping. Finally the rumor was conformed.

After some shopping, we would meet at the Pizza Hut for supper at 9:30 p.m. we were told by Sajid. A quick walk to the market allowed for us all to enjoy the Indian culture. A surprise for me was that Delhi was a lot friendlier than first thought. While everyone enjoyed the offerings, most of the guys purchased traditional outfits for themselves to wear to graduation, and everyone continued to check their loved ones off the gift list by purchasing special items for them. Some of the class was quick to find the most familiar landmark to our eyes. The Golden Arches of the famous American restaurant, McDonalds. Could it be, a McDonalds in Delhi with those crispy golden fries and a hamburger? Well not quite, the fries were true, but the Big Mac turned out to be a Veggie burger, but the McChicken and McFish live strong in Delhi. The group then gathered at Pizza Hut where we shared pizza and our newly found treasures purchased at the market. After nine days in India, the group was charged to finish strong after a little taste from home.

Day 10, March 27 - KARL Scribe, Jay Joy



We awoke on the 9th day of our journey to partly cloudy, although comfortable weather. After a quick breakfast in the Hotel Southern, we loaded the buses for our day's journey to Agra, which is south of New Delhi. Our first stop of the day was at a Hindu temple on the outskirts of New Delhi. As in all of the religious sites we visited during our tour, we were required to wear socks only and ladies had to dress "modestly"; which is to say they had to cover the majority of their bodies before entering the temple. The temple was a very beautiful structure, adorned in gold and maroon colors with shades of cream. Once inside, we observed several Hindu priests administering blessings upon followers who left special "gifts" for the various Gods. After we left the temple and on the way back to the bus, several of our group members were able to witness a real life snake charmer. Although the practice of "snake charming" is now illegal in India, you are still able to find takers who'll risk fine for the chance of making a rupee or two. Hesse and Frank were particularly impressed with the snakes as Frank actually had a picture taken with one draped around his neck. Yes, he is crazy which also fits with the fact he's from Lawrence!!!

After loading the buses and picking our trusty tour guide, Mr. Raj Kapoor, up along the way; we headed south for destination Agra and the Taj Mahal. We had a little "surprise" along the way courtesy of the left shoe of our resident comedian from Salina. Let's just say the moral of the story is to watch your step when venturing next to a tree that has recently served as an "Indian Latrine". We stopped and ate lunch at Hotel Moti Mahal; which by the way had a killer chicken soup that was much appreciated after 7 straight days of curry. After a brief exercise on the local adventure course, we loaded up again for the final 2 hour leg to Agra. Along the way, Dr. Vincent and Jack led us in a discussion where we were each asked to comment on the issues of population growth/control; resource constraints; and any solutions we would provide if we had the power to address those issues. We also discussed what we were prepared to do to address the domestic issues we are facing back in the States and how we would educate those back in the US about the issues being faced in India and any misconceptions we had before coming that had been disproved after spending time in

country. Joe mentioned he had already made plans to go to his kids' school with pictures and stories from India. Danielle committed to being better at recycling and making more efficient use of our resources. Nathan resolved to continue his work in mentoring people thru financial planning classes and stepping up his involvement in local water planning and use issues.



We arrived in Agra and after checking into the Hotel Taj View; made our way down to the local market for some more shopping and haggling with the local vendors. We rode on the popular 3 wheeled rickshaw taxi's like a motorcycle gang rushing to a rally.



The hotel had some local talent that could read palms, tea leaves and minds it seemed. Katie couldn't resist.

http://www.ksre.ksu.edu/karl/p.aspx?tabid=85



Awaiting our return to the hotel was a "western" style dinner; at least that's what Jack led us to believe. I don't know where they got their beef but I'm sure it wouldn't have graded back in the States. Tired and full – we all retreated to our rooms for a good nights rest and the memories that would await us the next day – the Taj Mahal.

Saturday March, 28 - Scribe, Josh Jennings



Today was Day 11 in India...the final day. This morning about ten KARL group members and Assocom employees played a game of cricket. There was a lot of excitement and restlessness this morning. After being gone for almost two weeks many people were ready to see their family and friends back home. This wasn't the only thing making people excited though, today was the day we got to visit the Taj Mahal. Earlier in the trip Ms. Holly Higgins at the U.S. Embassy said that there were only two people in the world, those that have seen the Taj Mahal and those who have not...she was right.



We made it to the Taj Mahal about mid-morning. It was amazing!!! We had a fantastic tour guide that gave us a great tour filled with wonderful information. Many people think the Taj Mahal is a royal palace or a religious building/structure. Actually the Taj Mahal is a mausoleum. The fifth Mughal Emperor (Muslim) Shah Jahan actually had the Taj Mahal built for his wife, Muntaz Mahal, who died after giving birth to their 14th child. This is truly a "monument of love". It took 22 years (1632-1653), 20,000 workers, 1,000 elephants and nearly 40,000,000 Rupees to build. It is completely made of marble besides some decorative designs inlaid into it made up of precious gems such as jasper, agate, and black onyx.



The symmetry and architectural design is mind-blowing this day in age let alone over 400 years ago. I feel this is why it is known as the 8^{th} Wonder of the World. The four pillars that surround the Taj Mahal may look straight, but they are actually leaned outwards a few degrees. Some engineers and architects believe this was done so if there was an earthquake the pillars would fall outwards instead of inwards toward the main structure. In 1659 the emperor's son had him imprisoned at the Agra Fort just down the Yamuna River, and put in a cell that viewed the Taj Mahal. The emperor was planning to build another Taj, only of black marble, across the river for his tomb. The son did not want the family fortune spent and jailed his father. People think this was done in hopes that the emperor would die of a "broken heart". The Taj Mahal also ended up being the final resting place for the emperor after he passed away.





After leaving Agra we stopped at the Hotel Moti Mahal Deluxe for lunch with the full Assocom staff and their families. There was also time to relax and freshen-up a bit before getting on the road and heading to Delhi. There was about a 2-3 hour drive between the hotel and Delhi, so of course Dr. Vincent used this time to pass around the microphone to discuss our past two weeks in India. Many different topics came up from government, economics, infrastructure, to children and education.



We made an unscheduled stop along the 4 hour drive to observe local farmers harvesting wheat. It was the process used by our ancestors some 100 or more years ago but had the same result...a proud farmer feeding a hungry population.



Before arriving at the airport we stopped one more time to eat and freshen-up. This would be the last time loading and unloading the bus before arriving at the airport.

No class member or alumni on the tour had been to India before. This was the first for everyone but Jack. If you asked the 35 people that went what they thought about India, I would bet you get 35 different responses; but I guarantee every one of them came away with a great learning experience and a different view of the world they live in, something the KARL program is good at doing. For that I want to say THANKS!!

Day 12 - Sunday, March 29, 2008 - Scribe, Stephanie Jacques

We began our day sitting in the airport in New Delhi, all of us ready and rearing to get home. Although it was a wonderful trip, the thought of reuniting with family members and a big juicy hamburger gave us incentive to say goodbye to our new found friends and return home half a world away.

A few of us grabbed a bite to eat at the airport's Subway. However, regardless of the fact that we had just spent two weeks eating Indian food some of us were still surprised that when the menu says chicken ham it does not mean chicken and ham.

We taxied out on to the runway of New Delhi at 12:25 am on our American Airlines Boeing 777 and were up in the air by 12:36 am. In flight movies, video games, and much needed rest as well as writing in our journals about the trip, occupied us over the 14 hour and 40 minute flight. We flew north over Russia and Greenland then down through Canada, finally landed in Chicago. We were welcomed by a cold blast of air as we stepped foot onto American soil.

The majority of the class made it through customs without any issues; however Rob was discovered as a beef jerky smuggler (Mule). Despite trying to explain that he had brought the beef jerky from America and that there was no way that you could even find beef of any type in India, customs confiscated the jerky.

After getting through customs the class headed straight to the food court at 5:30 in the morning. Maddog looking desperately for beef! We chowed down on a variety of American food and Starbucks coffee then headed to the gate for our final flight into Kansas City. The ice and snow in Chicago delayed our fight while they de-iced the plane and a few were even offered a voucher to wait until the next fight in an effort to lighten the load. The only one from our group that took the offer was Carolynn Burns. The class showed their

gratitude as she made her way off the plane since the rest of us, with our bellies full were excited to get home. As we waited for the plane to take off we all gave birth dates/time and name suggestions for two new babies in the KARL family. Both Jay Joy and Mike Froebe's wives were expecting.

When the plane landed in Kansas City, we noticed that the threats of snow and ice had melted away and we could safely reunite with loved ones. After many hugs and goodbyes we headed our separate ways, grateful for the experience of a lifetime and proud to be Americans.



DEDICATED TO OUR KARL BROTHER DAVID GOVERT

