BLAZING AN INTERNATIONAL CAREER PATH IN PLANT PATHOLOGY

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CAREER OPPORTUNITIES IN INT’L DEVELOPMENT

OBJECTIVES:

• Twists and turns of my own career path
• Finding the opportunity…
• Brief explanation of the job…
• Key lessons learned…
• Tips for success…
INT’L CAREER PATH

FIRST SELF DETERMINED STEP…

• When in the process of choosing a PhD program after finishing the MS, I *insisted* that the program would try extremely hard to provide me with some int’l field research experience

• Shopped around and the best bet available to me was UIUC’s USAID-supported INTSOY Program
SUCCESS FACTOR

TIP: IF CONSIDERING AN INT’L CAREER, GET ACADEMIC/TECHNICAL EXPERIENCE IN A FOREIGN COUNTRY AS EARLY AS POSSIBLE, AT ALL COSTS!! (MUCH MORE VALUABLE THAN PEACE CORPS TYPE EXPERIENCE)

UNIVERSITY OF ILLINOIS “EXCHANGE PROGRAM” WITH BRAZIL’S NATIONAL SOYBEAN CENTER (FUNDED BY USAID/INTSOY)
EMBRAPA – NAT’L SOYBEAN RESEARCH CENTER
LAB, GH, & EXPT. STATION PLOTS
LAGO – ON FARM RESEARCH
PALMEIRA – ON FARM RESEARCH
RESEARCH PLOTS IN CENTER OF COMMERCIAL FIELD
LESSONS LEARNED

• ADAPT TO LOCAL CUSTOMS. BE A CHAMELEON, CHANGE YOUR SKIN TO FIT IN AND BE ACCEPTED BY YOUR FOREIGN CO-WORKERS

• NEEDED TO CONVINCE THE FARMERS TO ALLOW US TO DO THE OFR. WAS NOT AN EASY SELL JOB. AS A SCIENTIST, NEEDED TO DEVELOP SOCIO-CULTURAL SKILLS (FARMER NEGOTIATION 101)

• STRIVE TO MAKE THE FARMERS FEEL LIKE TRUE PARTNERS IN THE RESEARCH, NOT JUST LAND PROVIDERS
SELF-AWARENESS

• BRAZIL EXPERIENCE COMPLETELY CONVINCED ME THAT MY FUTURE WOULD BE DEDICATED TO AG DEVELOPMENT IN LDCS

• HOSPITALITY OF BRAZILIAN RESEARCH STAFF AND FARMERS WAS AWESOME

• FINALLY FOUND A NICHE: SAW ROLE FOR MYSELF AND MY PLANT PATH SKILLS AT INTERFACE BETWEEN RESEARCH AND THE SMALL, RESOURCE-POOR FARMER IN LDCS
“FRINGE BENEFITS”
CONSULTATIVE GROUP FOR INT’L AGRIC. RESEARCH (CGIAR)

The CGIAR Mission

• To achieve sustainable food security and reduce poverty in developing countries through scientific research and research-related activities in the fields of agriculture, forestry, fisheries, policy, and environment.
CONSULTATIVE GROUP FOR INT’L AGRIC. RESEARCH (CGIAR)

The CGIAR has five areas of focus:

– **Sustainable production** (of crops, livestock, fisheries, forests and natural resources)
– Enhancing **National Agricultural Research Systems** NARS (through joint research, policy support, training and knowledge-sharing)
– **Germplasm Improvement** (for priority crops, livestock, trees and fish)
– **Germplasm Collection** (collecting, characterizing and conserving genetic resources - the CGIAR holds in public trust one of the world’s largest seed collections available to all)
– **Policy** (fostering research on policies that have a major impact on agriculture, food, health, spread of new technologies and the management and conservation of natural resources)
CGIAR CENTERS

Africa Rice Center (WARDA)
CIAT - Centro Internacional de Agricultura Tropical
CIFOR - Center for International Forestry Research
CIMMYT - Centro Internacional de Mejoramiento de Maiz y Trigo
CIP - Centro Internacional de la Papa
ICARDA - International Center for Agricultural Research in the Dry Areas
ICRISAT - International Crops Research Institute for the Semi-Arid Tropics
IFPRI - International Food Policy Research Institute
IITA - International Institute of Tropical Agriculture
ILRI - International Livestock Research Institute
IPGRI - International Plant Genetic Resources Institute
IRRI - International Rice Research Institute
IWMI - International Water Management Institute
World Agroforestry Centre (ICRAF)
WorldFish Center
Entry-Level Employment Opportunities (i.e., Post Docs)

- Plant Breeding, Agronomy, Horticulture, Soil Science, Plant Path., Entomology, Agricultural Economics, Anthropology (*Ph.D. and language skills required – but no int’l experience required*)

- Training
- Information Dissemination & IT
- Public Relations/Marketing
- Human Resources
Opportunity: Competitive application for Post Doc in Wheat/Barley Program
BREEDING
INOCULUM PREP AND APPLICATION FOR DISEASE SCREENING
THE OBJECTIVE (BARLEY LEAF RUST)
COUNTLESS HOURS IDENTIFYING PROMISING LINES AT MULTIPLE SITES
GLOBAL SEED DISTRIBUTION
TEAM MANAGEMENT
TRAINING VISITING SCIENTISTS FROM DEVELOPING COUNTRIES
LESSONS LEARNED AT CG CENTERS

• HAD TO CHECK YOUR PHD AT THE DOOR AND PROVE YOURSELF WITH LONG HARD HOURS IN THE FIELD.

• WHETHER PATHOLOGIST, ENTOMOLOGIST, AGRONOMIST, YOU HAD TO DEVELOP AN INTIMACY WITH THOUSANDS OF GERMPLASM LINES AND HOW THEY REACTED TO ADVERSE ENVIRONMENTAL CONDITIONS AND DISEASE PRESSURE – BREEDING SKILLS WERE THE MOST HIGHLY VALUED SKILLS

• HAD TO LEARN TO WORK AS A MEMBER OF MULTIDISCIPLINARY GERMPLASM IMPROVEMENT TEAMS.

• HAD TO MANAGE LARGE TEAMS (CREWS) OF LOCAL WORKERS AND WIN THEIR RESPECT. WITHOUT SUCH RESPECT, THEY COULD EASILY BUT SUBTLELY HAMSTRING YOUR ACTIVITIES
MULTINATIONAL FOOD COMPANIES

• AGRICULTURAL RAW MATERIAL PROCUREMENT (BASIC REQUIREMENT)
• RELIABLE YEAR ROUND SUPPLY
• HIGHEST POSSIBLE QUALITY
• LOWEST PRICE

(KRAFT, NESTLE, MCDONALD’S, FRITO LAY, CONAGRA, STARBUCKS, DOLE)
PFI
(= INT’L DIVISION OF FRITO LAY U.S.)
PEPSICO INC. – ca.1988
OPPORTUNITY: AGRO MGR FOR LAC & EUROPE WITH FL INT’L DIV (NETWORKED/NEVER ADVERTISED)
PFI - 1988

PEPSICO WORLDWIDE FOODS OPERATIONS
CHALLENGE = MAINTAIN GLOBAL UNIFORMITY OF KEY BRANDS
LAY’S CHIP IN KOREA = LAY’S CHIP IN OHIO
(SUCH UNIFORMITY ONLY POSSIBLE WITH
RIGOROUS AGRO RAW MATERIALS
MANAGEMENT)
PROBLEM: EXTREME DISUNIFORMITY OF AGRO SOURCING SYSTEMS (PFI HARVEST: KOREA)
PFI HARVEST: CANADA
FACTORY DELIVERY: PFI
THAILAND
FACTORY DELIVERY: USA
COMMERCIAL SEED PRODUCTION (HOLLAND)
SEED: IN-VITRO
PLANTING: ALABAMA
PLANTING: TURKEY
IRRIGATION: MONGOLIA
IRRIGATION: THAILAND
PESTICIDES: FLORIDA
PESTICIDES: DOMINICAN REPUBLIC
HARVEST: ITALY/CHINA
TYPICAL (ATYPICAL??) CHALLENGES
UNIFORM GLOBAL HARVEST: “THE GOAL”
SOUTH KOREA: PROCESSING PLANT
SOUTH KOREA: FARMER RELATIONS
TURKEY: CAVE STORAGE
TURKEY: STORAGE
SPAIN: FARMER RESISTANCE TO OUR RECOMMENDED VARIETIES
SPAIN: VARIETIES (REACHED COMPROMISE WITH THE FARMERS)
LESSONS LEARNED: PFI AGRO RAW MATERIALS MANAGER

• Had to become “jack of all trades”, furthest departure from plant path yet (seed production, seed movement, crop production, contract growing schemes, transport, storage, processing quality, etc…)

• Learned to provide technical input into high level business development decisions through participation in recon missions (essentially provide SWOT analysis on agro raw material situation to high level executives)

• Learned to treat farmers as entrepreneurs and business partners
The Office of Nutrition, headquartered in Washington, has an experienced technical staff of scientists and program experts.

USAID has field offices in over 80 countries. Technical staff assigned overseas are responsible for oversight of research and market surveys and management of projects.

In every country, USAID also has contractors in the field to provide technical assistance to USAID-supported projects. Organizations and their personnel are selected for their technical skills as well as familiarity with the country and language.
USAID PROJECT OFFICER

- GLOBAL/REGIONAL/COUNTRY MGMT
- CONCEPTUALIZE, PRIORITIZE PROJECTS
- WRITE PROJECT RFPS
- SELECT WINNING BIDS
- PROJECT OVERSIGHT
- PROJECT M&E (IMPACT ASSESSMENT)
- CONSTANTLY REDEFINE PROJECT OBJECTIVES BASED ON POLITICAL BUZZ
- LOBBY FOR BUDGET SUPPORT
USAID PROJECT OFFICER (OPPORTUNITY CREATION)

• MID-CAREER ENTRY THROUGH FELLOWSHIP PROGRAM (COMPETITIVE APPLICATION)

• BID AS AAAS FELLOW FAILED, BUT IT GOT ME NOTICED… BROUGHT ME IN THROUGH ANOTHER FELLOWSHIP MECHANISM

• TIMING WAS LUCKY: WANTED SOMEBODY WITH BACKGROUND IN PRODUCTION AG, FOOD PROCESSING, INT’L PRIVATE SECTOR EXPERIENCE TO SERVE AS PROJECT OFFICER IN USAID’S GLOBAL OFFICE OF NUTRITION

• MANAGE A PROJECT THAT LINKED AG WITH NUTRITION THROUGH FOOD FORTIFICATION, FOOD PROCESSING, AND DIET DIVERSIFICATION
NUTRIBUSINESS

Fortification & Enrichment

Food Processing & Preservation
BURKINA FASO: SOLAR DRYING
BURKINA FASO: SOLAR DRYING
GUATEMALA
(VITAMIN A DEFICIENCY)
GUATEMALA: FORTIFICATION OF SCHOOL LUNCH BISCUITS WITH VA (INCAP)
GUATEMALA: CROP DIVERSIFICATION IN LOW RAINFALL AREAS
GUATEMALA: CATCHMENT TECHNOLOGIES FOR FFV PRODUCTION IN LOW RAINFALL AREAS
USAID PROJECT OFFICER
(KEY LEARNINGS)

• SPEND CONSIDERABLE TIME JUSTIFYING (DEFENDING) EXISTENCE AND FUNDING LEVELS OF THEIR PROJECTS

• HIGH TURNOVER/TRANSFER RATE OF STAFF

• VERY FEW ARE TECHNICAL EXPERTS (RELY ON CONTRACTORS FOR FIELD DESIGN AND EXECUTION)

• CONTRACTORS DO THE MOST INTERESTING WORK!! (BUT USAID OFFICERS VIEWED WITH PRESTIGE SINCE THEY HOLD THE PURSESTRINGS FOR PROJECT STARTUPS, EXTENSIONS, ETC…)
ENTRY POINTS FOR JOB OPPORTUNITIES WITH USAID

NEW ENTRY PROFESSIONALS (NEPS – experience based)

• Applicants must demonstrate a combination of experience, education and training equivalent to seven years of professional experience directly related to the specific position to be filled, or a Bachelor's degree in a relevant major plus 3 years of relevant experience, or a Master's degree in a relevant major plus one year of experience, or, a Ph.D. in a relevant major, or an equivalent combination of such education and experience.
ENTRY POINTS FOR JOB OPPORTUNITIES WITH USAID

FELLOWSHIP PROGRAMS (degree-based)

• USAID currently has 8 fellows programs, utilizing, as of June 30, 2000, 145 fellows -- 65 in the Global Bureau, 21 in other Bureaus, 40 in field missions, and 19 in non-USAID locations.

• Demographically, the fellows are highly educated, 48 percent hold Ph.D.s, 46 percent master's degrees, 4 percent with medical or law degrees, and 2 percent with bachelor's degrees.
ENTRY POINTS FOR JOB OPPORTUNITIES WITH USAID

FELLOWSHIP PROGRAMS

• Amer. Assoc. for the Advancement of Science (AAAS)
• Johns Hopkins Health & Child Survival Program
• Univ. of Michigan Population Fellows Program
• World Learning Democracy Fellows Program
• Investing in Women in Development (IWID)
• Emerging Markets Development Advisors Program (EMDAP)
USAID CONTRACTOR

- RESPOND TO RFPS

- REPUTATION BASED ON ABILITY TO RECRUIT HIGH QUALITY CONSULTANTS ON SHORT NOTICE (EACH HAS PROPRIETY DATABASE OF “ON-CALL” EXPERTS)

- DESIGN PROJECTS FOR USAID

- IMPLEMENT PROJECTS FOR USAID

- PROVIDE TRAINING AND TECHNICAL EXPERTISE

- NGO (CARE, SAVE THE CHILDREN, WORLD VISION, NDI, UNIVERSITIES)

- PRIVATE CONSULTANCY FIRMS (DAI, CHEMONICS, ABT, WINROCK…)
USAID ASIA BUREAU: REGIONAL AGRIBUSINESS PROJECT (RAP)

- OPPORTUNITY CREATION: CONTRACTOR (DAI) RECRUITED ME WHILE I WAS STILL “INSIDE” USAID (I AGREED TO BE PUT ON THEIR PROPOSAL, AND AGREED TO SERVE IF THEY WON…. THEY WON!)

- PROJECT WAS BASED IN DC - SUPPORTED FIELD ACTIVITIES IN 6 ASIAN COUNTRIES (PHIL, INDO, NEPAL, BDESH, INDIA, SRI LANKA) USING 4 SUBCONTRACTORS AND 5 KEY STAFF

- Sample RAP Activity: NEPAL VA SUBPROJECT: NUTRITION MONITORING AND FFV PROMOTION
NEPAL: PROJECT AREA
(TULSIPUR)
NEPAL: RAP VA PROJECT
NEPAL: RAP VA PROJECT
(HOUSEHOLD INCOME SURVEY)
NEPAL: RAP VA PROJECT
(NUTRITION MONITORING)
NEPAL: RAP VA PROJECT
(FOOD CONSUMPTION SURVEY)
NEPAL: RAP VA PROJECT
NEPAL: RAP VA PROJECT (OUR PROJECT PROVIDED BASELINE DATA JUST BEFORE A HIGH VALUE HORT PROJECT WAS TO BE IMPLEMENTED)
LESSONS LEARNED FROM USAID PROJECT IMPLEMENTATION AS A CONTRACTOR

• WORK IS MORE FULFILLING THAN ON THE USAID SUPERVISORY SIDE

• CAN DEVELOP LASTING RELATIONSHIPS WITH LOCAL OFFICIALS, CONSULTANTS, PROJECT BENEFICIARIES

• VERY DIFFICULT TO BUILD SUSTAINABILITY INTO USAID PROJECTS (SHORT TIMEFRAMES, HIGH RATE OF TURNOVER OF USAID STAFF)
“BASIC” TIPS FOR PURSUING AN INT’L CAREER IN DEVELOPMENT

• LANGUAGE
• FOREIGN COUNTRY EXPERIENCE EARLY
• TECHNICAL SPECIALTY (> MA/MS/MBA)
• UNDERSTAND DEVELOPMENT THEORY
• TOOL BOX WITH SPECIAL SKILLS TO SET YOU APART (GPS, CROPS, WASTE MGMT, SOLAR POWER, DRIP IRRIGATION, MICROFINANCE, COOPERATIVES)
TIPS FOR HAVING A SUCCESSFUL CAREER IN INT’L DEVELOPMENT

• GO WITH YOUR “GUT”
• NETWORK LIKE CRAZY
• NEVER BURN ANY BRIDGES (DEVELOPMENT COMMUNITY IS SMALL)
• NEVER PIGEON-HOLE OR STEREOTYPE YOURSELF (BECOME A JACK-OF-ALL TRADES!)
• DON’T BE AFRAID TO JUMP INTO UNFAMILIAR TERRITORY OUTSIDE YOUR “COMFORT ZONE”
• VERSATILITY + HUMILITY + RESPECT!!!
TIPS FOR HAVING A SUCCESSFUL CAREER IN INT’L DEVELOPMENT

• DEVELOP A SENSE OF SOCIAL RESPONSIBILITY…

• DEVELOPMENT WORK IS MORE THAN JUST A “GOOD” JOB IN AN “EXOTIC” PLACE – IT’S A PRIVILEGE, AN OPPORTUNITY TO TACKLE THE HUGE PROBLEMS OF POVERTY ALLEVIATION, HUNGER, AND DISEASE…

• THESE COUNTRIES ARE BEHIND… IF YOU FAIL, YOU HAVE WASTED THEIR VALUABLE TIME, AND THEY HAVE PRECIOUS LITTLE TO SPARE…
Remember…

IN INT’L DEVELOPMENT WORK YOU ARE OFTEN GOING TO GET STUCK IN VERY BAD WAYS…

LEARN TO IMPROVISE!!
UTILIZE LOCAL KNOW HOW AND TEAM BUILDING
DON’T DISREGARD OLD FASHIONED REMEDIES
STAY SAFE....
WHEN THE STRESS IS OVER-BEARING, (AS IS OFTEN THE CASE WITH AGRICULTURAL PROJECTS) FIND WAYS TO RELAX…
BLOW SOME SMOKE…
(THAILAND)
FOOT MASSAGE… (CHINA)
BEACH TIME… (PHILIPPINES)
OVERTIME, WITHOUT PLAYTIME, CAN HAVE ITS CONSEQUENCES...
HERE’S TO YOUR HEALTH – BEST OF LUCK AS YOU “GO INTERNATIONAL”!!