

TRIP REPORT24 October - 6 November, 1980W.A. GROSS, VITAPurpose

- I. Interview :
  - A. Louis St. Jean regarding the possibility that he might become a consultant-rep during his volunteered time and thereafter in North Africa/Mid East, and eventually a full time Field Rep.
  - B. Oscar Mann regarding becoming an East Africa Field Rep.
  - C. Yohannes Mesfin regarding becoming a senior energy advisor.
- II. Meet with AID mission and program staff in Kenya and Lesotho regarding VITA program development in East and Southern Africa.
- III. Meet with VITA contacts (and others with whom VITA may become involved) in Kenya and Lesotho regarding program development.

Results

- I. A. Agreed with L. St. Jean that he will prepare a budget estimate for 2½ months of program development in North Africa, operating out of Tunisia. If we reach agreement, he will volunteer one month, and ask us to pay him for the remaining period what we perceive to be appropriate. Then he would come at our expense to VITA for a two week briefing. If there is agreement, he will thereafter begin his 2½ month program development effort. At the conclusion of that period, we will decide whether he will become our full-time Near East representative.
- B. Oscar Mann is very highly regarded by people in Kenya and beyond as a creative, productive, results oriented person. He planned and developed the Karen A.T. Centre. He knows Kenyans, the system, the people, the geography better than most. He has just completed work in the Sudan. He will become our East Africa (down to Lesotho) Field Rep, taking one month of orientation at VITA during February, then beginning in Nairobi in March. We began the process of getting

government recognition of VITA as an NGO operating in Kenya. Oscar will pursue this for a week before going to India. It may require a memorandum of understanding, a first draft of which was prepared.

- C. Yohannes Mesfin, presently directing the Village Technology Unit in Maseru, Lesotho, will undertake a two - three month consultancy for ILO relating to AT in seven African countries. After transferring responsibility for the VTU, he will join VITA about May 1 as a senior energy advisor.
- II. A. Oscar and I met with Kenya AID Mission Director Allison Herrick, Kevin O' Donnell, Joe Pastic. They all responded very positively to VITA setting up a Regional Office in Nairobi. We proposed that they identify someone to be their contact person. Our rep, Oscar Mann, will maintain informal and, as required, formal contact with that person. Joe Pastic is especially interested in the program and wants to interact with it.
  - B. Oscar and I met with Ray Love, AID REDSO, and several of his staff. They responded positively to the VITA program and to our setting up the Regional Office in Nairobi. They asked how they can help. They particularly emphasized that they would like the VITA program to operate independently without being bureaucratically hamstrung. They thought we ought to be able to just give our grants without the two week waiting period. Ray agreed to appoint a liaison person to interact as required with our program.
  - C. Yohannes Mesfin and I met with Steve Norris, Capital Projects Development Officer, Lesotho. The Mission Director, Frank Correl, was out of the country. Steve is especially interested in the VITA program and pleased that it will start. He would like VITA help, as appropriate, in the planned RE program for Lesotho.
- III. A. John Polgreen (UNICEF) was delighted with the VITA material I brought him. He is very interested in AT implementation. He said he would like to stimulate some good SG proposals. He expects to be in Nairobi for at least two years. Since he occupies the position Oscar Mann previously had, the two had many mutual UNICEF and AT interests and acquaintances.
  - B. The Karen AT Centre is very impressive. Developed by Oscar Mann, with many of his innovations, it is still in very good condition. It now has about 700 visitors a month, and conducts training sessions.
  - C. John Polgreen will follow the Documentation Center Manual that VITA produced on a self-learning process. If it seems that he needs more, he will visit VITA, perhaps when he takes home leave. John promised to find appropriate groups for small grant funding and notify us. He wonders if VITA could link to the UN Computer in Geneva; their UNICEF computer can.
  - D. Oscar's wife Vivian and he made and grew as much as possible of what they ate and wear. They have lived in Sudan in a single mud floor home with their one year old daughter Zora Star. Oscar is, among many other things, a professional photographer.

- E. Oscar Mann's parents, Igor and Erica, have been very active in Kenyan development, aiding in project definition and organization, animal production, planning, crafts, etc. They knew intimately the last AID Mission Director, and have been involved in AID projects. (Oscar is familiar with log frame). The Mann home/museum is open for tea at 4.30 daily to friends. People from the Pope to janitors have come. Their home/museum is said to have one of the finest collection of an art.
- F. Gary Gallon and Dominique Coartelle (Belgian) at the Environmental Liaison Centre. Gary is "doing" the NGO forum, 10 - 21 August in Nairobi. They expect 200 NGOs, 300 officials at the meeting. Dominique recommended learning from Frères des Hommes International about their small grant experience. The ELC appears to be effective, and to fill an important function.
- G. Dominique recommended renewable energy innovations in refugee camps - an approach to groups like the urban poor who have had their cultural roots shattered.
- H. The Kenyan Polytechnics haven't yet developed effective RE programs. They represent a good resource, but those in power have not yet recognized the potential enough to implement action.
- I. Patrick Noike and Phil O' Keith, Ministry of Energy, are interested in improved efficiency charcoal stoves. They reported unsatisfactory experience with wind power to date. Furthermore, they had problems with using hydraulic rams because of land ownership. Kenya's informal industrial sector produces about 1/3 of Kenya's industrial production. They could use improved pyrolytic converters.
- J. Noike/Keith said that they are pleased to have VITA set up a regional office in Nairobi; it is "a good idea". They would like to use VITA services. They will have a USAID supported \$600,000 small grant program to administer. We proposed that the MOE appoint a counterpart person to interact with Oscar Mann.
- K. Richard Kraemer, Peace Corps Director, gave us a small grant proposal from a PCV. Oscar is reviewing it. Kraemer offered to provide a desk secretary, telephone for the regional office at negligible cost.
- L. Alex Duncan, geologist, recommended Dae Molapo, a rural Lesothoan, as a creative, active AT person. Yohannes Mesfin has his name.
- M. Reviewed the REP with Edward Rice of the World Bank.
- N. Reviewed REP with Dr. Ramachandram, Executive Director, Habitat, UNDP, and also Michael Platzler and Mathias Hundsalz.
- O. Charles Khaminwa, PFP Director, PO Box 60570, Nairobi, tel. 560148, is very interested in joint PFP/ VITA efforts. An entrepreneur himself, he is putting together a Women in Development program with AT components. He seeks USAID, Ford Fn. fundings. The PFP program has a staff of 41

in Kenya, mostly working in the west. He would like to have six months technical assistance from VITA. I offered to help if they provide the funding. (PFP also has programs in Malawi, Botswana, Upper Volta and Nigeria).

- P. Charles Khaminwa suggested that PFP and VITA identify a depressed community and develop a program for it. I asked him to seek to have the PFP field reps identify such a community and let VITA know so we can explore this possibility further.
- Q. I asked Charles Khaminwa to consider asking each of the PFP field workers to set objectives of two inquiries per month and one small grant proposal per two months. I offered help with appropriate hands-on workshops and short term consultancies.
- R. Herbert Anderson, an unusually creative and effective AT village worker, has been working with nomads and making many contributions. He has been involved in all of the important renewable energy efforts. For example, he found he doubled his biogas methane output by mixing in some chicken manure. He operated diesels with the methane (after starting with diesel fuel). He also operated diesels with vaporized gum arabic. Wind power had been set back by prior government policy, now reversed.
- Anderson observed that the nomads in his area maintain a seven year planning cycle (in some other areas, the cycle is eight years). He recommended Genesis 39-45 for a prescription for famine relief. He is supported by Lutheran World Relief through NCCK.
- S. Drs. Michael Wood and Roy Shaffer, African Medical Relief Foundation, (The Flying Doctors), are interested in having VITA interaction. They have recognized the need for AT. They may bring VITA proposed programs, submit inquiries, provide flying and printing service. They emphasize too: start small; don't push too much too fast. Since burns in home are perhaps their major problem, Wood was especially interested in VITA's Lorena stove efforts. Wood also warned of "paralysis by analysis".
- T. Harold Miller, National Council of Churches of Kenya (NCCCK) told of a windmill program which was a disaster. For the first time, China has agreed (responding to Kenya's request) to send a team to help Kenya with biogas. The NCCCK did a thorough study of biogas, and now is doing more wood, reforestation work, both part of their AT account. They now are pursuing ox power. He observed that eucalyptus trees appear to be disasters because they suck so much water from the soil. The traditional acacia, however, supports a whole community of growth.
- U. Harold Miller observed that the two primary problems with biogas units are 1) handling the waste, and 2) treating it like the continuous process it is. Another factor is follow-up. The Chinese had good research and extension service. The IDRC has found that interior walls give increased performance.

- V. Harold Miller recommended:  
Joseph Ikalur, Christian Development Education Services, Box 14343  
David Kilman, World Neighbors, tel: 60838  
Al Cher, doing ox power work  
St. Johns Community Centre  
Johnson Moshita, Christian Industrial Training  
Wesley Morris, with a trade school (he lived at subsistence level)
- W. Joe Pastic, AID Kenya, would like to see the REP small grants listed in VITA News. He thinks the program is great; word about it needs to be spread.
- X. Spoke with Joel Moiki, a Maasai, near his home in the bush, about a possible wind powered water pump system, and with him and Kes Hillman about life in the bush.
- Y. Learned a little about Uganda events from Lise Sparrow who is involved in an Experiment in International Living project there.
- Z. Ray Love proposed that REDSO might spin off to VITA small projects they couldn't afford to handle. We indicated that some VITA programs may grow to the point AID would be interested in them. His staff recommended that we build an environmental analysis into our small grant application appraisal. He offered use of the pouch, cables, etc. to help the REP.
- AA. Freeman Pollard, of a population organization, explained his experience getting NGO status - and the desirable privileges.
- BB. Phil O' Keith noted that there is no single contractor in the world who could do the "rag bag" MOE/AID R&D program. He would like to see some good cookstove, charcoal production advisors in the program.
- CC. Virginia Hazzard described difference between UNICEF regional and country programs. UNICEF and VITA should interact in several ways. She may be reassigned to China next February. Kay Eilbert is the UNICEF liaison officer in Lesotho. She emphasized the micro aspect of development: what works in one area doesn't in another.
- DD. Mrs Nova Olambo, University of Nairobi, wife of a government minister, pointed out that VITA will probably be subjected to pressure from MPs to fund projects in their districts. There is very strong village control of politics. People return (at risk of their lives on the roads) to vote.

### Lesotho

- EE. Tholoka Khabisi, of the Ministry of Rural Affairs, demonstrated several AT models. There appeared to be little creativity and neither identifiable R & D efforts nor implementation efforts. Was this effort wasted?

- FF. Peter Hayes is supporting co-op efforts, appearing to do a good job.
- GG. Richard Bard and Jack Dawn, Lower Income Housing, explained their system. I recommended designing for passive solar heating and explained how greenhouses could be adapted to their basic designs.
- HH. Gary Klein, Orla Hansen, Frank Meyer, and Masmatzi of Thaba-Tseka reviewed their program. They are alert, innovative people who seem to be doing valuable solar development work. They are short of sheet metal skills. They need skills training there and would like to have some workshops. They gave a number of inquiry requests. Three of their solar ovens are regularly being used (they bake bread in two hours). Their solar cell/battery system has been working well since April. Their mud (lorena) stoves are efficient only if several pots are used.
- II. Visited sheepskin handcraft factory which employs 80. It appears to be well organized by expatriates who have Lesothan counterparts. Sadly, the Lesothan sheepskins have not been salted properly (and perhaps other problems). Hence the factory imports the skins from S. Africa!
- JJ. Visited the CARE Project in Lesotho, a mohair factory. They have sought purchasing help from VITA. A Danish volunteer designed a practical, low cost spinning wheel. Marshall French is the CARE Director. We reviewed possibilities for future CARE/VITA interactions.
- KK. Steve Norris, AID Lesotho, will be the local projects officer for the Lesotho RE program. He is very supportive of our REP and believes it very important that we keep the AID missions informed of our project.
- LL. Met with Joseph Cavalli, UNDP Deputy Resident Rep. Like the World Bank, UNDP is switching to rural, urban poor. UNDP subcontracts with developing organizations, such as FAO, to conduct programs. Informed him of possibilities.
- MM. Reviewed REP with Dr. Quaku Apier, Ministry of Planning, and Estelle Apier Esq. of the Ministry of Justice.
- NN. Joe Molefi (who seems especially able) interviewed me for his morning Radio Lesotho program.

Opportunities/Actions

Responsibility

- |                             |  |
|-----------------------------|--|
| Henry Norman                | 1. VITA might join with EDI (Sandy Hale), or some other group and propose to conduct part of the AID funded RE program in Kenya to be conducted by the Ministry of Energy. The RFP will soon be announced in the CBD. Henry has agreed to pursue.  |
| Bill Gross                  | 2. The Government of Kenya has signed a 4.8 million dollar program with four donors. VITA may have a role to play.   |
| Oscar Mann                  | 3. Joint efforts with PFP may be possible. Pursue with Charles Ford Khaminwa, Esq., PFP Director, PO Box 60570, Nairobi.   |
| Oscar Mann                  | 4. Obtain NGO status for Regional Office in Nairobi, preparing proposed form for Memorandum of Understanding.  |
| Margaret Crouch             | 5. Consider stocking Rural Training Techniques, I. Mann, FAO Ag. Dev. Paper 68, FAO, Rome, 1960 (several languages).   |
| REP Staff                   | 6. Refugee camps may offer opportunities for urban poor programs. The REP staff is asked to explore these possibilities when travelling and it is feasible, and with aid-offering agencies working in refugee camps. People in such camps have been uprooted from their culture, have a current homogeneous environment and need, and may be receptive. Among them must be some entrepreneurs. Renewable energy possibilities may exist. |
| Bill Gross                  | 7. Frères des Hommes has over 20 years experience making small grants in Africa. See what we can learn from them.  |
| Bill Breslin                | 8. Determine conditions under which VITA could connect with the UN Computer in Geneva and advise relative to advantages and disadvantages.   |
| Stephen Clark               | 9. Send the Ministry of Energy, c/o Phil O' Keith (Electricity Building, Nairobi, Kenya), a complete package of VITA energy-related publications at their expense.   |
| Liz Cecelski                | 10. Rich Kraemer, Peace Corps, Nairobi, recommended contacting Jacques Wilmore in Tanzania. They have substantial forestry interests.  |
| Brij Mathur<br>Sandy Atkins | 11. Charles Khaminwa reports that the PFP in Liberia was involved with an effort in which charcoal was mixed with cassava to stretch use of the charcoal. The resulting briquettes burned more cleanly with a blue flame.  |

Alice Gerlach  
Stephen Clark

12. It was suggested that VITA arrange to have complete library of VITA pubs in AT centers about the world. The plus and minus factors of this need to be assessed.

Lessons Learned or Reconfirmed (or Hypotheses Proposed)

1. There is a great shortage of vocational level and entrepreneur skills among the people in the developing countries I've visited.
2. The aid supplied by donor agencies has had many effects. Among them are two negative factors which stand out in Lesotho, and may also appear elsewhere.
  - a. Donor money has tended to centralize decision making, attract the innovative, energetic into the bureaucracies - away from the village-barrio level where, in the absence of the money attraction, they may have focused their skills-building upon existing strengths.
  - b. Officials in developing countries too often appear not to have been sensitive to building upon existing strength, a step at a time. In leapfrogging, they have built expensive (often money losing) hotels, banks, etc. For example, Lesotho has much expensive building underway, splendid banks with imported marble, a money losing first class Hilton Hotel, but no intermediate level hotels, and not even an inexpensive enlarged covering for the market place which might induce expansion of market place entrepreneurship. The politics and vested interests of those who gain direct or indirect power appear to have been a major factor in these actions.
3. Automobiles, alcohol, poor roads, and people from developing regions, seem to result in too high a mortality rate. Just as the death rate is particularly high on HW 44 through Navajo country, USA, so too is it in at least two developing countries. People in Kenya observed that they take their "life in their hands" when they drive to their village homes from Nairobi. In Lesotho, twenty people died, I was told, as a result of many people driving to the inauguration of Thaba Tseka District.
4. AT centers have chronic shortages of AT publications. Usually they have copy machines. They would like complete sets of VITA publications.
5. It takes a key person, often with entrepreneur skills to accomplish an effective program. Though not sufficient, it appears to be a necessary condition. Part of VITA's small grant program must be to identify the key persons and give them latitude.

### Observations

1. Louis St.-Jean. Louis appears to be knowledgeable and land rich but cash flow weak. He seems to be committed to service, experienced in agriculture, and familiar with a range of Arabic differences. He notes that it takes much time for things to happen when Arabs are involved. The fact that his consulting business is slow leads him, I believe, to be interested in the kind of opportunity VITA provides. He would like to be the Mid-East rep. His English is good.
2. Charles de Gaulle airport is affluent, busy, expensive. An American told me he had spent \$10 for a hamburger.
3. Rome airport is nearly vacant, machine gun armed carabinieri all over, TWA pulled out, seems eerie. A light snack cost \$6 at the airport.
4. Photocells. When told of a proposal to use photocells for powering an electric fence to protect seedling trees, someone told me that goats have eaten photocells; that bird droppings have been problems in Africa.
5. The Fairview Hotel, old, charming, gracious, charges S 125 (S 7.4 = \$1) per night for room and breakfast. The nearby Panafrique (across the street from the Manns') has a pool, is more modern, and charges S 250 per night, room only.
6. Gary Gallon, Environment Liaison Centre, is strong, able, perceptive. He won an award in Canada for his environmental work. Oscar Mann started the ELU and got it recognized as an NGO with appropriate privileges.
7. Dr. Igor Mann and wife Erica have authored and illustrated a number of VITA-like manuals on topics such as bee-keeping, tanning, etc. I am exploring possibilities that one or more might be republished by VITA. As all observers say, Dr. Mann is incredible: prolific, energetic, creative, perceptive, versatile, and, understandably, widely respected. At 70, he operates on all 70 cylinders. Up at 3 a.m. to begin work, he also travels and consults all over the world. His main focus has been growth and effective use of animals and other resources.
8. Dr. Mann called my attention to: Fulder, Stephen "The Drug that Builds Russians," New Scientist, v.87, n.1215, 9.21.80, pp. 576-9. The shrub Eleutherococcus, like, but even stronger than ginseng, appears to act upon the hypothalamus reducing negative effects of stress and increasing performance. Russian research has published thousands of papers on ginseng, and hundreds on eleutherococcus. It is used by cosmonauts and 12 million Russians yearly!
9. The University of Nairobi gives an MA in AT in their School of Education. There is a lot of interest in AT among young professionals.
10. Deforestation in Kenya has progressed so rapidly that recent landsat observations show that forests cover only 2½% of Kenya. Five years ago, the coverage was 5%.

11. Importation of food to Sudan has increased 18x in five years.
12. Rural Africans in Kenya and Sudan tend to live in extended family groups. More primitive, Sudan has more potential. Some of the things Oscar Mann started six years ago are still going. He found that entrepreneurial efforts worked better than direct aid. Most often, with respect to AT, the entrepreneurs have been white.
13. The Flying Doctors might give free transportation to our VITA Field Rep.
14. Kenya has volunteers from many countries: Japan, Germany, England, Holland (very strong), Norway, Sweden, U.S., etc.
15. Kenya has 97 languages: Swahili is their rationally generated "Esperanto-like communication language".
16. Kenya's fledgling Ministry of Energy is just getting started. Nevertheless, with AID pressure, Phil O' Keith pushed through the proposed AID supported RE program in one week.
17. The amount of volunteerism and innovation in Kenya is impressive.
18. Eucalyptus trees may be unsatisfactory for reforestation because they dry out the soil and don't support other life as do other trees.

#### Lesotho

19. The Lesotho RE program lists 12 criteria to be used for funding their projects:
  - 1) must use only renewable energy sources;
  - 2) must meet a felt need;
  - 3) must be well understood by the technological community (proven);
  - 4) must improve thermodynamic efficiencies or time expended by at least a factor of two (2);
  - 5) must be very low in cost;
  - 6) must be easy to construct and maintain;
  - 7) must use indigenous or locally available materials and skills;
  - 8) must result in a positive net energy analysis within the unit lifetime;
  - 9) must be environmentally benign or result in environmental enhancement;
  - 10) must show the potential of being accepted such that a natural demand for the RET will occur;
  - 11) must be presented and designed to permit innovation on behalf of the user;
  - 12) must have the potential for marketing VET skills and RET units within the village.
20. Lesotho is remarkably similar in geographic aspects to New Mexico. Temperature range, latitude, erosion, solar dependability. However, the magnetite rock causes more severe lightning storms.

21. People are buying Wonderbox, a "haybox" in cardboard using cloth covered (beanbag like) polystyrene beads.
22. The ATI Thaba Tseka project appears to be fruitful. So too is their support of the Appropriate Technology Unit in Maseru.
23. Finding qualified, motivated counterparts is a major problem. Only some such appear likely to do well.
24. The Lesotho market place has simple solar ovens and solar water heaters for sale.
25. Several organizations such as the German AT Exchange (GATE) and the Tropical Products Institute (England), as well as ITDG, put out good quality, VITA-like publications.

Calendar of ActivitiesOctober 25 - November 6 Africa Trip

<u>Date</u>	<u>Action</u>
Oct. 25, 26	Flew Washington to Nice; interviewed Louis Saint-Jean Flew Nice to Nairobi (two nights on airplanes)
	<u>Nairobi</u>
27	Arrived 3 hours late, Nairobi Met, interviewed Oscar Mann. We met all other people in Nairobi together. Met: Dr. Igor and Erica Mann, UNEP, etc. John Polgreen, UNICEF
28	Met: Kevin O' Donnell, Joe Pastic, AID Mission Gary Gallon, Dominique Coartelle, Environmental Liaison Centre Visited: Karen AT Centre (UNICEF sponsored) with Polgreen, Mann
29	Met: Patrick Noike, Phil O' Keith (Ministry of Energy) Richard Kraemer, Peace Corps Kevin O' Donnell (again) Alex Duncan, geologist Dr. Ramachandran, Exec. Director UNDP Habitat, and Michael Platzer and Mathias Hundsalz Charles Khaminwa, PFP
30	Met: Drs. Michael Wood, Roy Shaffer, Flying Doctors (AMRF) Herbert Anderson, prolific RET doer in West Kenya Harold Miller, NCKK Alison Herrick, AID Mission Director with Kevin O' Donnell, Joe Pastic
31	Met: Joel Moiki, a rural Maasai, and Kes Hillman, animal biologist
Nov. 1	Met: Ray Love and his staff Phil O' Keith, MOE Virginia Hazzard, UNICEF Nova Olambo, University of Nairobi Dr. Dennis Schmidt, UNEP Environment Director
Nov. 2 - 3	Travel Nairobi - Lesotho

Lesotho

Nov. 3	Met: Yohannes Mesfin, Director ATU, Maseru Tholaka Khabisi, Ministry of Rural Affairs Peter Hays, Lesotho Co-ops Richard Beard, Dr. Jack Down, Lower Cost Housing Gary Klein, Orla Hansen, Frank Meyer, Thaba Tseka project
--------	---

- Nov. 4            Visited: Sheepskin factory  
                      CARE project (mohair factory), spoke with  
                          Marshall French, CARE Director  
Met: Paul Van Shaik, Dr. Sam Hall, Architects, Ministry  
      of Works  
      Steve Norris, AID Mission  
      Joe Cavelli, UNDP
- 5                Met: Seeng Mokitimi, Mesfin counterpart  
                      Interviewed by Joe Moletsi, Radio Lesotho
- 6                Returned home - arrived 4 hours late