What is your idea? What problem will this idea potentially solve if implemented?

- Tell us a little about the implementation of such an idea. How will it work? How feasible is it?
- What are the potential obstacles? What do you see as the main problems, in terms of long-term sustainability?
- What scale of funding will you require? Can you think about any sources for your funding?
- How many people, and what sort of people, would you require on your team?
- What is the approximate timeline?

Angelica Weiner

Raja- I had a lot of trouble with this assignment. I don't have enough background or have anywhere near enough preliminary knowledge to assess solutions to problems in Africa yet. Based on some current event articles I have come up with a vague idea, but I am unsatisfied with the results.

In attempting to make Africa competitive in world markets, it must consider what it has to offer and then find a way to market or use it. I remember from my Latin American Studies class that one of the biggest problems in creating wealth in developing regions was that nobody had a title to, and therefore no real ownership of, their own land. My idea is for farmers and rural land owners to plot the boundaries of their land with a GPS tracking system. GIS computer technology can then make layered maps of property lines, resources, and structures to get an idea for the real development and distribution in an area. Then city planners or town councils can assess these properties in terms of who owns the land and its value. The land can then be sold and passed on through generations accordingly. Ownership is a key element in a competitive economy so I think drawn boundaries recorded in some official way is necessary for potential business transactions. While this may not be immediately useful, long term growth in Africa necesitates land titles. Also, a bigger part of the problem isn't just drawing boundaries, but enforcing them. That is another problem to be addressed.

Mapping out land and legally distributing records is only the first part in property rights reform that requires coalition between individuals and the government. GPS coordinates can be plotted by landowners with handheld tracking devices. These images can be traced to an online website or database and able to be accessed by public officials and less likely, the land dwellers. The reason it is important for the changing habitations to be plotted is because civil war and water shortages often cause displacement of peoples in Africa and previously owned properties shouldn't be simply lost. Officials can then work on appropriate layout and planning. Foreign investors such as pharmaceutical companies wanting to buy large tracks of land need to be aware of whose property they are potentially infringing on.

This is really a problem of policy reform and education. Poor farmers and communities need to be aware of their land rights and what that means. The government needs to protect citizens' rights and promote foreign investment property. Usually NGOs

and international groups work to address these issues. Technology can be utilized to facilitate in the process by giving policy makers an idea of boundaries in these rural areas. Thus the idea is research-based and provides no real immediate improvement in quality of life.

GPS tracking devices are inexpensive and can operate on batteries. Informing poor Africans why property rights are important and why they should track their land would be more challenging than using the technology. A few informed Africans can lead the projects in their respective regions, generally passing the device from person to person until a region is mapped. The points can be accessed online and interpreted by researchers. Using a GPS device requires literally walking around property lines. The project doesn't need to be extremely sustainable because it's benefits are indirect, needed only to be mapped occasionally as for comparison and information in land reform policy. It would take motivated, informed individuals leading the projects who come from inside our outside of the communities.

A team would consist of urban planners, lawyers for policy-making, and activists to teach property rights and land reform to rural Africans. Funding would be required for the GPS systems, travel expenses, informational videos/packets, and computers with GIS for mapping. Funding would come from African governments, NGOs, and international development organizations on the large scale. As an MIT project the Public Service Center fellowships would fund research towards African land reform. A timeline would involve immediate research on property rights in Africa and existing legislation. After this there would be a trip to Africa to hand out GPS devices and start an education initiative on land rights. This would probably take about ten weeks to complete for a particular region like the horn of Africa . From this point research and interpretation of data would follow, and then eventually a proposed land reform bill. The proposal writing process would take about 4 weeks.

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