Taking advantage of the new nomadism:

Mobility and large scale training in the context of horticulture for development

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Rise of mobility is at the core of a new nomadism. Rapid spread of mobile telephones in developing countries was not anticipated about fifteen years back. The tele-density figures (number of telephones per 100 inhabitants) in many developing countries ranged from 1-10 with rural areas having even lower densities. Today, these range upwards of 50 for most developing countries (see, for details, http://www.itu.int). Deep and lasting impacts of this expansion are still being chronicled: m-Pesa in Kenya has created in less than five years the equivalent of a postal money order service which was in the making for decades. In key sectors such as banking or railways, unprecedented services have been created on a mass scale. In the last three years, data services via mobiles are also advancing in many developing countries. Analysts at KPCB, a global technology investor, have pointed out that in some of them, internet traffic from mobiles in 2012 equaled or exceeded that from PC's and laptops. This opens up possibilities to build even more data services on mass scale.

So how can efforts to inform and advise smallholder farmers endeavoring to produce and market high value crops take advantage of these developments?

While considering this, we need to look at three more developments: one is a development in mobile technology, the rise of low-cost computers or Tablets. Another is the rapid increase in the number of skills development courses offered entirely online. Third is another unanticipated development, the Massive Open Online Courses (MOOCs) that have brought advanced courses from front-rank universities to anyone with an internet connection.

Tablets became mainline consumer IT products only in 2010 with Apple's iPad as the pioneer. Global technology companies market Tablets today starting from a US price level of $200. Tablets of no-name brands can be sourced at about $50 a piece. There are about ten countries in the world today that have enabled or set up mass distribution programs for Tablets for high school or college students. In effect, an affordable digital learning/training support device has become readily available.

A long-held belief (one that defines training in the agricultural sector today) is that training and skills development are meaningful only if the trainer and the trainee/farmer are in the presence of each other for at least a reasonable duration of the training. Training via distance mode was

a non-starter where skills development was concerned. Not so anymore. There is a wide range of organizations that offer skills training online for technicians in say automotive installing/servicing or painting. Canada offers many examples. A random example from a Google search for crafts is here. Recent advances in user interface design and advances in research in user experience make it even easier to offer skills development online and a Tablet is an appropriate way to access the learning materials. MOOCs now provide the technological means to connect literally thousands of learners with good quality learning materials. COL's recent experience in running a large scale online course (2255 participants from 116 countries) showed that a significant number of participants used Tablets to access the course regularly.

We can bring these various strands together to visualize a horticulture training program for farm advisors serving small-holder horticulture enterprises that may be located far away from the experts and facilitators. It is possible to utilize the experience of skills development efforts online to build this paradigm. Tablets would be useful for participants to access the training materials from wherever they are. MOOC platforms provide the means for participants to connect to instructors using mobile phones, Tablets or PC/laptops. Testing and assessment of skills can be carried out using proctoring methods that are already widely used for certification in higher education and industry. There are ongoing discussions in North America on accrediting learning experience from online courses/MOOCs. Innovative efforts such as the OERu, a multi-stakeholder effort partnered by COL, are offering viable new solutions that horticultural education and training institutions might use.

For learners who live and work in areas without regular access to power and connectivity, COL has developed a digital device set called Aptus which enables learning materials to be distributed by facilitators visiting remote sites. Aptus can also enable trainees in those locations to participate in networked assignments and evaluation exercises.

In short, there are unprecedented opportunities available to advance horticultural skills and training on a very large scale. Personal trainer-trainee contacts in this context should be viewed as optional and not an essential requirement. It would be most optimal to understand and ally with ongoing efforts to offer or gain academic credit for competence development through online courses.