Value Chain Field Research

Thomas Reardon Michigan State University

Overview of talk

- a) Basic description of a VC the simple version vs the complex reality
- b) Classifying products and identifying scope/areas and then
- c) Classifying VCs
- d) Identifying issues and research questions
- e) Studying VC in meso scoping
- f) Studying VC in micro scoping
- g) Studying VC in "stacked surveys"

1. Description of a VC – the simple version vs the complex reality "Fish image" with spine and (long) fins **Examples from fish and vegetable** Caudal fin Dorsal fin forward movement balance, staying upright Operculum (gill cover) Anal Fin Pectoral Fin balance steering Pelvic Fin steering

2. Identifying the Product(s) Studied/Compared

a) "Product cycle" Local niche \rightarrow (broad) bulk commodity \rightarrow differentiated products \rightarrow cycle again, per product

b) Categories of differentiation:
"variety", size, appearance, safety,
environment/production

c) Examples
... kiwi fruit
... Java vegetable, like tomato
... Philippines, lettuce
... US, "porous" vs "non-porous" chicken

d) Note Interface with changes in technology, institutions, organization creating different VCs as move along Product Cycle 3. Determining the Geographic Scope of the study

- a) Spectrum of VCs spreading out from selected production zone?
- b) Spectrum of VCs coming into selected consumption zone?
- c) Example of a focus: VCs study on rice/potato from "main zone supplying main city"

d) Example of a focus: all VCs for shrimp from Central Java to any final consumption zone

e) Variants on c and d, such as over city types, or over production zone types
(dynamic vs hinterland, or commodity vs differentiated product zones)

f) Variant: Evolution OVER TIME(controlling for product and production zone or consumption zone) of product VC

4. Classifying VCs, controlling for the product (note link to meso scoping)

- a) Categories of variables used to classify VC variations for a given product (from "traditional" to "modern" by STRUCTURE and BEHAVIOR
 a.1) Over segments
- ... geographic length

... intermediational length (scope of activity per actor+ degree of vertical integration)

... vertical coordination via institutions (contracts, standards)

a.2) Per segment

... "<u>structure (io)</u>" (concentration and multinationalization of capital (volumes))

... <u>organization</u>: Horizontal integration/coordination within (or over) segment(s) (clusters, coops)

... <u>Technology</u> distribution (mean and variance) over sub-segments (e.g., predominantly capital intensive for large firms, labor intensive for small firms?)

... <u>Institution</u> distribution over sub-segments (application of contracts, standards)

b) Illustration of classification from traditional to
"modern" using those categories of analysis
... fish VC example (seen as evolution)

5. Issues/Research Questions regarding VCs

- a) Above are "factual questions" (what was? What is?)
- b) Research questions use arrays of facts/data to determine causal relations and correlations

... what determines structure and behavior of VC?

... What effects does structure and behavior of VCs have?); here are examples:

b.1.) "Efficiency": e.g., What is the correlation of type of VC for a given product and overall efficiency of delivering product from farmer to consumer? (like "total factor productivity")

... variant: Targeted (specific factor) efficiency/productivity or input intensity evaluation: What is the correlation of VC type and energy (or water or transport time, etc.) cost per ton of product x delivered to end?

b.2) "Equity": What is the distribution of net income per ton (like margins) over segments of the VC, and over actor types per segment?

b.3) "Structural Change" over VC and its performance implications in the above two dimensions (what determines consolidation or lengthening and how does it affect distribution of gains and efficiency) b.4) Behavior in a given segment over actors and its performance implications and VC structure implications

... e.g., policies lead to diffusion of cold storages and irrigation in sending zone which deseasonalizes VC to consumption zones and reduces product price to consumers (Indian potato example) 6. Meso Scoping Mission: "Lay of the land" focused on <u>structure</u>

- a) Targets production zone/s, transit zone, and consumption zone/s
- b) Goal is to understand the possible array of types of VCs for a "given product" and array of variations on that product

C) Focuses on "structural" questions about the VCs for that product (leading from, coming into the zones)
... the "over segment" questions (geographic & intermediational length, etc.)

... the "per segment" questions (concentration, etc.)

.. Geographic variation (sub-zones) within areas

d) Practical example from West Java mango meso scoping mission

7. Micro Scoping Mission: Key informants, focused on <u>behavior</u>

a) Same zones as meso scoping mission

b) Meso scoping mission provided "structure" of the VCs for the product, hence STRATA to sample from per segment for the micro scoping mission

Example...

- c) Essence of KI micro questions (and then questionnaires for surveys):
- ... assets now and 5 and 10 yrs ago
- ... how/what BUY (inputs) , ditto
- ... how MAKE (production), ditto

... how SELL (marketing), ditto
With how = "who, what, where, when, why,
how"?

8. Third scoping mission

- a) Sample frame for surveys
- b) Pre-Test questionnaires (over strata per segment), "robustness", "contours", "ease"

9. Stacked Surveys

- a) A survey per segment
- b) Questionnaires with same logic as VC KI question structure
- c) Gold: big differences with key informants at times and with conventional wisdom, examples
- d) Example from Bangladesh fish VC