A (Very) Brief Introduction to Case Study Research Methods

1. So ….. why do we want to do this in the first place?
   - Enhance learning
   - Prepare more completely for the trip
   - More systematic exploration of a specific topic
   - Promote synthesis from teamwork and writing
   - Facilitate teaching others about what you have learned

2. Two general types of research questions
   - Why? How?

3. Case studies are appropriate if:
   - You are asking why and how questions
   - Contemporary event
   - Lack of control over subjects

4. Components of case study research designs

- Questions
  - how and why questions that motivate the study

- Propositions (if appropriate)
  - what do you think the answers might be (based on literature, intuition, theory)
  - state as “hypotheses” to be “tested”
  - in purely exploratory or descriptive cases, there may be no propositions

- Unit of analysis
  - what is the case “about”
  - person, family, community, business
  - economic policy, legislation
  - technology development

- Logic linking data to propositions
  - criteria for interpreting findings
  - making inferences
  - pattern matching
• Written report
  – format
  – content
  – style (thick description)

5. Types of case study designs

• Single case
  – one unit of analysis, one context
  – all eggs in one basket

• Multiple case
  – one unit of analysis in multiple contexts
  – replication not sampling

• Embedded
  – multiple units of analysis
  – very complicated

6. Data collection

• Background using secondary sources
• Interviews –“hearing data”
• Primary data (documentary evidence) from the unit of analysis
- Observation
- Maintaining data files, “chains of evidence”, interview tapes

7. Developing a case study protocol
- How to go about collecting and interpreting case study evidence
- Guidelines for report writing
- See Appendix A for an example from Farm Information System case study

8. Analyzing evidence
- Multiple data sources
  - Secondary data
  - Interviews
  - Documentary evidence
- Convergence
  - data sources point in the same or different directions
- Pattern matching
  - do we observe certain variables that seem correlated with others?

In-Class Exercise:

1. Within your study group, prepare a list of questions, starting with “how” or “why,” that you think are important (or that you would like) to investigate in China.

2. Try listing a few propositions to test.

3. What unit (or units) of analysis would be appropriate?

4. What sort of evidence would you collect? How?

5. How would you make inferences from your evidence? How would you “test” your propositions?

6. What would you include in your report?
Appendix A
Interview Protocol
Farm Information Systems (NC-191)

A two-visit protocol is proposed that would permit a consistently conducted reconnaissance followed by more in-depth study of a specific decision. Of course additional visits could be arranged if needed. The protocol would include the following general steps:

• Call prospective case to discuss their willingness to participate
• (Optional) Develop baseline information using pre-interview mailing
• Conduct Interview 1
• Develop a preliminary report and provide a copy to the family for verification of accuracy
• Circulate the case report to selected NC-191 members for comments, questions
• Conduct Interview 2 primarily focused on a strategic decision and the role of information in making and implementing the decision (also, seek answers to questions raised by NC-191 reviewers)
• Draft a final report and have the farm family review
• Circulate case to selected NC-191 members for comments, questions
• Develop final report

Additional detail on the major steps of the protocol is outlined below.

Pre-Interview Activities

• Complete IRB applications, other paperwork required when human subjects are part of research project
• Initial phone contact
  - describe the project objectives
  - discuss farm characteristics to reaffirm eligibility or appropriateness for case study
    (Have they done something unique or innovative in their farm information system?)
  - encourage them to include as many stakeholders as possible in the interview
• Follow-up letter (with returns)
  - outline of project, protocol
  - expectations
  - obligations, honoraria, expenses
  - human subject releases, etc.
  - (Optional) NC-191 Interview Packet Advance Mailing
  - (Optional) goals worksheets or critical success factor worksheets
• If used, review returned NC-191 Interview Packet
• Prepare for Interview 1 based on returned materials and follow-up phone calls
Suggestions for Interview 1

- Consider taking a tape recorder so that you can review the interview when needed in writing up the case study.
- Take someone with you (student or colleague) to also take notes and listen. This is important!
- Let subjects tell their story:

Tell us about your farm organization.
- activities, enterprises
- decision makers
- stakeholders (including spouse, children, in-laws as appropriate)
- educational background (years of school, degrees) of stakeholders
- off-farm job experience of stakeholders
- job descriptions, family members’ roles (sketch out an organizational chart)
- evolution of farm business (brief history, key changes, external events)
- goals and values
- long-term expectations, hopes for business, succession plan

Tell us about your farm information system.
- survey material
- evolution of current system
- standardized office routines?
- stumbling blocks? disappointments?
- what are they proudest of in their MIS?
- what kind of MIS did their parents have?
- impacts on organization, responsibilities
- perceived impact on management
- future plans

How do you use information from your system on the farm?

Production information
- output, input measures (what they look at)
- if appropriate, ask to see sample reports

Financial performance
- current and past measures (what they look at)
- if appropriate, ask to see sample reports
- D/A ratio and total value of assets

Critical success factors
- identify CSFs by area (production, finance/marketing, human resources)
- how well does producer think they are doing with respect to CSFs?
- how does the information support achieving CSFs?
- facilitator’s guide format (p. 19) or materials from MSU’s strategic planning
Listen carefully for what is said as well as what may not be said
Listen for and ask questions about things that may be unique to them
Ask to see the office
Identify a strategic decision for subsequent interview

**Preliminary Report**

- Draft this as soon as possible after the interview. Schedule time to do it! The longer you wait, the more difficult it becomes as you try to recall the interview.
  - use notes from Interview 1
  - ask the other interviewer/observer to contribute
  - use written materials provided (if any)
  - note areas needing clarification, additional details

- Develop plans for Interview 2
- Draft letter to case study asking them to review the preliminary report, notify you of changes needed or respond to questions for clarification. At the same time, let them know what to expect in Interview 2
- Once the preliminary report has been reviewed by family, circulate it to NC-191 reviewers

**Suggested Case Study Report Content**

The following outline is suggested for use in writing our case study reports. Every case farm is unique, so some portions of this outline may not apply to your farm, and other topics may need to be addressed that don’t appear here. However, the greater consistency we have among case study write-ups, the easier it will be to draw inferences and conclusions from among them as we construct our summary pieces.

**Introduction and Overview**
Summarize the farm’s resources, enterprises, and stakeholders. Review the farm family’s goals and their roles on the farm. An organizational chart or diagram illustrating management responsibilities may be helpful. A brief summary of the farm’s financial structure and performance should also be included.

**Farm History and Evolution**
Discuss changes that have occurred in the farm’s ownership, management, and production, emphasizing changes that have influenced the farm’s management information system.

**Management Information System**
Describe the primary components of the farm’s MIS, including internal and external information. Identify the primary types of information maintained and how this information is used in managing the farm. Also discuss who records, maintains, and reports information on the farm and relate the MIS to the farm’s production management and critical success factors. It may be important to describe how the MIS has evolved over time and relate these changes to the farm’s evolution.
**Decision Case**

Describe the decision case analyzed, emphasizing the role that information and the FIS played in making the decision. Discuss the outcome of the decision, if known. Analyze the strengths and weaknesses of the MIS in the decision-making process.

**Looking Ahead**

Present your views on the future of the farm and its MIS, and identify changes discussed or planned by the farm stakeholders.

* Suggested Activities for Interview 2

- Schedule second interview after you have received comments from NC-191 reviewers in case they raise additional questions about the preliminary interview.
- Again let them tell their story.

- Describe the strategic decision that resulted in changes in your farm information system
  - objectives, motivation
  - decision makers, stakeholders
  - problem identification
  - alternatives considered, rationale
  - selection considerations
  - implementation

  Role of information used in the decision
  - sources, uses
  - quantities, methods, measures
  - uncertainty
  - strengths and weaknesses of current MIS

  Impact of decision on MIS and impact of MIS on decision

**Prepare Final Case Study Report**

- Same process as for preliminary report.