DATACODE

Socio-economics of Pesticides Use in Rice production in the Mekong Delta

This Data CODE is used for understanding data entered in the worksheet files regarding to the use of pesticides in rice production in the Mekong Delta Vietnam -2003.

1. Some general notes of the Data CODE as follows:

   • The data is coded following the questions in the VN-final questionnaire.
   • Some variable names are denoted according to their meanings. For example, NAME (name of the respondent); BIRDAY: age of the respondent, etc.,
   • The rest of variable names are denoted by the letter Q (question) and the number followed indicating the question in the questionnaires. For example, Q3 means data of question 3; Q30 means data of question 30; Q301 means data of sub-question 30.1; Q302 means data of sub-question 30.2.
   • Some questions are separated in to different variables for easy calculation/analysis. For example, question 7.
   • Each variables are measured by specific units defined in this Data CODE.
   • Some questions have multiple answers, these answers are separated by a comma. For example, sub-question 22.1.
   • If there is no information for a question, then the Cell will contain the word 'None' for text variable, and 0 (zero) for numbered variable. Other Cells contain 0 (zero) have different meanings which are defined in variables. This format will make the worksheets could be used and analyzed by SPSS software V.9.0.

2. Name of variables and data in the worksheet are defined and denoted as the following:

   SAMPLE: Survey ID number: The first digit of the ID number refers to the code of the communes surveyed. Example: sample 321 is the interviewed farmer No. 21 of commune 3.

   PROCODE: Code of the provinces

<table>
<thead>
<tr>
<th>Province</th>
<th>AN GIANG</th>
<th>CANTHO</th>
<th>LONG AN</th>
<th>TIEN GIANG</th>
<th>TRA VINH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**COM: Code of the communes**

<table>
<thead>
<tr>
<th>District</th>
<th>Communes</th>
<th>COM.CODE</th>
<th>% poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Phu</td>
<td>Vinh Hau</td>
<td>1</td>
<td>55</td>
</tr>
<tr>
<td>Chau Thanh</td>
<td>Binh Hoa</td>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td>Vi Thanh</td>
<td>Vi Tan</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>Thot Not</td>
<td>Thanh Thang</td>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>Tan Thanh</td>
<td>Nhon Hoa lap</td>
<td>5</td>
<td>46</td>
</tr>
<tr>
<td>Thu Thua</td>
<td>Nhi Thanh</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Cai Lay</td>
<td>My Thanh Nam</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td>Cho Gao</td>
<td>Thanh Binh</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Tra Cu</td>
<td>An Quang Huu</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>Tieu Can</td>
<td>Ngai Hung</td>
<td>10</td>
<td>33</td>
</tr>
</tbody>
</table>

**NAME: Name of the respondent**

**SEX**: Sex of the respondent (question 1): 1. Male 2. Female

**BIRDAY**: age of the respondent in year born (question 2)

**ADDRESS**: contact address of the respondent within the commune. Within the commune there are many hamlets. Some hamlets are called by numbers, some having a specific name.

**DATE**: Date of interview: day/month/year

**TIME**: Duration of the interview (in minutes)

_Do you agree to participate in this survey?:_ Hundred percent of the respondents agree to go for interview, therefore no data entry for this ‘opening’ question.

**PART I: GENERAL INFORMATION OF THE FARM HOUSEHOLD**

**PART I.1 RESPONDENT AND HOUSEHOLD CHARACTERISTICS**

**Q3 (question 3)** What is the highest education level you have completed?

1. No schooling
2. Primary (<=5 years of schooling)
3. Secondary
4. Higher School (10-12 years of schooling)
5. Other

**Q4 (question 4)** How many years have you been staying in this village/district? (in years).

_If less than 5 years in this village, ask the following question:_

**BEFORE**: (question 4.1) Where did you stay just before coming to stay in this village?

1. In another village, but the same district
2. In another district, but the same province
3. In another province
Q5 (question 5) How long have you been working in farming? (in years).
  If less than 2 years working in farming, ask the following question:

PREJOB (question 5.1) What was your job before working in farming?
  1. Doing non-farm activities
  2. Being a white-color worker
  3. Other jobs

Q6 (question 6) Do you yourself work on this farm (that is, tilling the land, planting, harvesting, etc.)?  1 = Yes   2 = No

(How much of your total working time do you spend working on this farm relative to working on other farms or performing non-farming activities?)
  (Percentage of total working time)

ON     Working on this farm

OTHER  Working on other farms:

OFF    Working on non-farms

MEMBER (question 8) How many people, including yourself, live in your immediate household?

(How many of these family members work outside the farm for the purpose of earning income?)
  1 = Yes   2 = No

PART I.2 PROPERTY AND CROP CHARACTERISTICS

(Question 11) What is the size of your farm?

LAND     11.1  Production land: (ha)

In which:

RICE    11.1.1 Paddy land: (ha)
UPLAND  11.1.2 Upland crop land: (ha)
ORCHA   11.1.3 Orchard: (ha)
AQUA    11.1.4 Aquaculture land (ha)
11.2. Residential land: (ha)

(questions 12, 13) Does your household own this land?

OWN: % land rent

RENT: % land rent

(questions 13) Please provide information about the crop(s) produced last year on this farm in the following table:

<table>
<thead>
<tr>
<th>Type of crop</th>
<th>Area under cultivation (ha)</th>
<th>Crop season (name)</th>
<th>Production (in tons/ha)</th>
<th>Quantity sold (tons)</th>
<th>Market price VND/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROP1</td>
<td>AREA1</td>
<td>SEA1</td>
<td>YIELD1</td>
<td>SALE1</td>
<td>PRICE1</td>
</tr>
<tr>
<td>CROP2</td>
<td>AREA2</td>
<td>SEA2</td>
<td>YIELD2</td>
<td>SALE2</td>
<td>PRICE2</td>
</tr>
<tr>
<td>CROP3</td>
<td>AREA3</td>
<td>SEA3</td>
<td>YIELD3</td>
<td>SALE3</td>
<td>PRICE3</td>
</tr>
</tbody>
</table>

Note: 1. Type of crop: VEGE means vegetables

Q14 (question 14) Did you borrow money for crop production in the Summer-Autumn season 2003? 1 = Yes 2 = No

If yes, please specify detail terms of credit as in the following table:

<table>
<thead>
<tr>
<th>Source of credit</th>
<th>Amount (VND)</th>
<th>Duration (months)</th>
<th>Interest rate (%/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 Formal</td>
<td>AMO1</td>
<td>TIME1</td>
<td>INTE1</td>
</tr>
<tr>
<td>14.2 Informal</td>
<td>AMO2</td>
<td>TIME2</td>
<td>INTE2</td>
</tr>
<tr>
<td>14.3 Relatives with no interest</td>
<td>AMO3</td>
<td>TIME3</td>
<td>INTE3</td>
</tr>
</tbody>
</table>

(questions 15) What is the total yearly (cash) income from the following sources (in Dong):

INCO1 15.1 from crops
INCO2 15.2 from animal husbandry
INCO3 15.3 from raising, catching fishery
INCO4 15.4 earnings as hired labor
INCO41 15.4.1 in cash
INCO42 15.4.2 in-kind
INCO5 15.5 remittances
INCOME: Sum of the above income of the surveyed household

(16) Please provide us about type of farm machinery and equipment in your household

<table>
<thead>
<tr>
<th>Type of machinery and equipment</th>
<th>Number of units</th>
<th>How many years old (years)</th>
<th>Price paid for the equipment VND/unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pesticide Sprayer</td>
<td>NUM1</td>
<td>OLD1</td>
<td>COST1</td>
</tr>
<tr>
<td>2. Water Pump</td>
<td>NUM2</td>
<td>OLD2</td>
<td>COST2</td>
</tr>
<tr>
<td>3. Tractors</td>
<td>NUM3</td>
<td>OLD3</td>
<td>COST3</td>
</tr>
<tr>
<td>4. Others</td>
<td>NUM4</td>
<td>OLD4</td>
<td>COST4</td>
</tr>
</tbody>
</table>

**Note:** If three is more than one unit of one type of equipment, the figures in Cells OLD and COST are the average. For example: a household has two water pumps: 3 and 5 years old, cost 400,000/unit and 500,000/unit, then the average figure in the Cell OLD will be 4, and the figure in the Cell COST will be 450,000.

(17) Please tell us whether there are any of the following items in your household:

1 = Yes  2 = No

<table>
<thead>
<tr>
<th>Home facilities</th>
<th>Home facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIVI Television</td>
<td>COMPU Computer</td>
</tr>
<tr>
<td>RADIO Radio cassette</td>
<td>COOK Cooker</td>
</tr>
<tr>
<td>MUSIC Music player system</td>
<td>GAS Gas stoven</td>
</tr>
<tr>
<td>VIDEO Video/DVCD</td>
<td>WASH Washing machine</td>
</tr>
<tr>
<td>BICYCL Bicycle</td>
<td>TOILE Bathroom/toilet</td>
</tr>
<tr>
<td>MOTO Motorbike</td>
<td>BOAT Motor boat</td>
</tr>
<tr>
<td>REFRI Refrigerator</td>
<td>FURNI High quality furniture</td>
</tr>
<tr>
<td>FAN Electric fan</td>
<td>PIPWA Pipe water connection</td>
</tr>
<tr>
<td>TELE Telephone</td>
<td>ITEMS Other high value items</td>
</tr>
</tbody>
</table>

Q18 (question 18) Suppose that a farmer would like to build the same new house in this village as your current house, how much does it cost he/she? (not including the land value)

1. Value in VND  2. Do not know

Q19 (question 19) Each farm household in the village is classified by the local authority into different socio-economic groups: 1. Poor, 2. Non-poor; According to you, which group is your household belong to?

1 = Poor  2 = Non-poor
PART II: PESTICIDE USE IN RICE PRODUCTION

In this second section of the survey, I would like to ask you questions about the use of pesticides on your farm. Is there any pesticide used on this farm?

1 = Yes  2 = No  
If Yes: Continue the survey (Question 20).

Hundred percent of the farm household surveyed used pesticides, therefore no data entry for this general question at the beginning of part II

Q20 (question 20) Who is the main person with the responsibility of deciding which pesticide to buy?

1. The respondent
2. The other family member

Q21 (question 21) Do you buy the pesticides used in this farm from one or many different retailers?

1. One  2. Many

Q22 (question 22) Do you always buy the same brands of pesticides used in this farm, or do you regularly change brands of pesticides?

1. Always the same  2. Change regularly  3. Change sometimes

If change, then ask the following question:

Q221 (sub question 22.1) What is the reason why you regularly change brands of pesticides?

1. The new brand of other pesticide companies is better
2. The old brand is no more effective to pests
3. Following recommendation from retailers/pesticides companies
4. Following recommendation from agricultural officials
5. Others

Q23 (question 23) When you buy pesticides, does it happen sometimes that the container(s) has no label?

1. Never happen  2. It does happen sometimes  3. Often

Q24 (question 24) Who is the main person with the responsibility of deciding when to apply the pesticides?

1. The respondent
2. The other family member

(question 25) Who is the main person with the responsibility of applying the pesticide?
Percentage of applying/spraying pesticides

<table>
<thead>
<tr>
<th></th>
<th>Insecticides</th>
<th>Fungicides</th>
<th>Herbicides</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>The respondent</td>
<td>INS1</td>
<td>FUN1</td>
<td>HER1</td>
<td>OTHER1</td>
</tr>
<tr>
<td>The hired applicator</td>
<td>INS2</td>
<td>FUN2</td>
<td>HER2</td>
<td>OTHER2</td>
</tr>
<tr>
<td>Other family members</td>
<td>INS3</td>
<td>FUN3</td>
<td>HER3</td>
<td>OTHER3</td>
</tr>
</tbody>
</table>

(question 26) Please specify the method of payment of purchasing pesticides (%)

<table>
<thead>
<tr>
<th>Q261</th>
<th>Q262</th>
<th>Q263</th>
<th>Q264</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash immediately</td>
<td>Payment later at an agreed date</td>
<td>Payment after harvesting</td>
<td>Other method</td>
</tr>
</tbody>
</table>

(question 27) Log record of pesticides used in rice season

This information is recorded in “SOCIAL PESTICIDE LOG” file, the following variables are denoted and defined:

**PECODE:** (constructed variable) the sequence CODE of SAMPLE from 1 to 2412

**PESTNO:** The sequence CODE of pesticides used by farm household. For example, CODE 11 means pesticide No 1 in spray No.1, CODE 12 means pesticide No 2 in spray No 1, CODE 64 means pesticide No 4 in spray No 6. Three are 9 sprays during the season, and maximum 4 pesticides/spray.

**SAMPLE, PROCODE, COM, NAME, SEASON:** the same as in file “SOCIAL MEKONG 1”

**AREA:** Area in ha.

**NOSPRAY:** Number of sprays per season

**TSK:** Days before sowing (days)

**SKS:** Days after sowing (days)

**PEST:** Name of pesticide used

**CONCEN:** Concentration of pesticide

**DOSE:** Amount of pesticide used per hectare (ml/gr per hectare)

**GAI:** Active ingredient of pesticide (will be calculated later)

**TARGET:** Target pests to control (insect, weed, disease, snail,…)

**PRIC:** Unit prices of market pesticides (VND/ liter/kilogram)

**TOX:** Perceived toxicity
1 = Slightly hazardous  2 = Moderately hazardous  3 = Highly hazardous  4 = Extremely hazardous  0 = Do not know

Q28 (question 28). Do you mix different brands of pesticides before application?
1 = Yes  2 = No

Q281 (sub-question 28.1)
If YES, do you mix the required (by the label) quantity of each brand in the same water?
1 = Yes  2 = No

(sub-question 28.2) If YES, please specify the brand and mixture you use for the last rice season  NO RECORDING IN THE WORKSHEET ONLY FOR REFERENCE IN ANALYSIS

Q283 (sub-question 28.3) What is the main reason why you mix the pesticides this way?
1. Unsure about the quality of pesticides
2. Uncertain about the effectiveness of pesticides for a particular pest
3. Imitating other applicators
4. Following the suggestion of others
5. Other reason

Q29 (question 29). Did you change the dosage of pesticides per unit of land compared to the dosage you used for the same unit of land for other rice seasons last year?
1. Increased  2. Decreased  3. Same

If the answer is No.1 or No.2, Ask the following questions (%)

| Q291 (sub-question 29.1): Name of the rice season (if there is no increase or decrease in this season, then the CODE will be None) |
|---|---|
| Q2911 | Increased how much (%) |
| Q2912 | Decreased how much (%) |
| Q2913 | Why did you increase the dosage? |
| Q2914 | Why did you decrease the dosage? |
| 1. Everybody else increased | 1. Everybody else decreased |
| 2. Insects do not die anymore at low dosage | 2. Fewer pests (insects, weed, fungi, etc.) |
| 3. Suppliers say so | 3. Suppliers say so |
| 4. Just to make sure that it works | 4. Just to make sure that it works |
| 5. More pest incidence | 5. Apply new pesticides |
| 6. Other | Other |

Q292 (sub-question 292): Name of the rice season (if there is no increase or decrease in this season, then the CODE will be None)

| Q2921 | Increased how much (%) |
| Q2922 | Decreased how much (%) |
| Q2923 | Why did you increase the dosage? |
| Q2924 | Why did you decrease the dosage? |
| 1. Everybody else increased | 1. Everybody else decreased |
2. Insects do not die anymore at low dosage
3. Suppliers say so
4. Just to make sure that it works
5. More pest incidence
6. Other

| 2. Fewer pests (insects, weed, fungi, etc.) | 3. Suppliers say so |
| 4. Just to make sure that it works | 5. Apply new pesticides |
| 6. Other |

Q30 (question 30) Do you use any pesticide recommended for other crops, but you use them for rice:

1 = Yes  2 = No  3 = I don’t know

Q301 (sub-question 30.1): the name of pesticides

Q302 (sub-question 30.2) Please give a reason for such practice:

1. Acting on your own  5. Suggested by Companies
3. Imitating others  7. Suggested by NGOs
4. Suggested by retailers  8. Other

KNOWLEDGE/ TRAINING:

Q31 (question 31). On a scale of 1-5, how much risk do you think you are exposed to while using pesticides on this farm?

1. No risk at all  4. A large and significant amount of risk
2. Some small risks  5. Dangerous and very toxic risks
3. A medium amount of risk  6. I don’t know

Q32 (question 32). Do you currently practice any pest control techniques to reduce the need of using pesticides?  1 = Yes  2 = No

Q321 (sub-question 32.1)
32.1 If YES, which methods do you use:

1. Organic production  2. □ Biological control
3. Mechanical-physical techniques  4. □ Rotation of crop
5. IPM
6. Other

Q322 (sub-question 32.2)
If NO, did you ever adopt an IPM technique but are not currently practicing it?
1 = Yes, I am an ex-IPM practitioner
2 = No, I never practiced IPM

**Q323** (sub-question 32.1)
Why did you never adopt or abandon the practice?
1. Pesticide system is cheaper
2. Requires lots of labor
3. Was getting less crop (quantity and quality wise)
4. Other neighboring farmers did not participate
5. Practicing IPM is a big hassle
6. Doesn’t work
7. Imitating others
8. Other

**Q33** (question 33)
Have you received any formal training on IPM? 1 = Yes 2 = No

**Q34** (question 34)
Have you ever received basic training on safe handling and applying pesticides? 1 = Yes 2 = No

**Q35** (question 35)
If you have not received any training, do you have access to someone who provides such training? 1 = Yes 2 = No

**PROTECTION/ HABITS:**

*(question 36)* What do you typically wear while applying pesticides?

This information is recorded in “SOCIAL MEKONG 2” file, the following variables are denoted and defined

<table>
<thead>
<tr>
<th>Do you use it?</th>
<th>If you do not wear it, why not?</th>
<th>Is it in good condition?</th>
<th>Cost/unit (VND)</th>
<th>How often is it replaced?</th>
<th>Who recommended to use it?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USE</strong></td>
<td><strong>REA</strong></td>
<td><strong>CONDI</strong></td>
<td><strong>EXP</strong></td>
<td><strong>DURA</strong></td>
<td><strong>RECOM</strong></td>
</tr>
<tr>
<td>1 = Yes</td>
<td>2 = No</td>
<td>1 = Yes</td>
<td>VND/ unit</td>
<td>Months</td>
<td>1. NGO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = No</td>
<td></td>
<td></td>
<td>2. Agricultural Official</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3. Pesticide retailer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4. Pesticide companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5. Public media</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6. Other</td>
</tr>
</tbody>
</table>

>Note:

No other protection equipments used by the farmers except 7 items in the table, therefore NO record for other equipment.

Variable names followed by numbers from 1 to 7 represented for the following protection equipments:
<table>
<thead>
<tr>
<th>Hat/Head cover</th>
<th>USE2</th>
<th>REA2</th>
<th>CONDI2</th>
<th>EXP2</th>
<th>DURA2</th>
<th>RECOM2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasses</td>
<td>USE3</td>
<td>REA3</td>
<td>CONDI3</td>
<td>EXP3</td>
<td>DURA3</td>
<td>RECOM3</td>
</tr>
<tr>
<td>Mask</td>
<td>USE4</td>
<td>REA4</td>
<td>CONDI4</td>
<td>EXP4</td>
<td>DURA4</td>
<td>RECOM4</td>
</tr>
<tr>
<td>Full sleeve shirt</td>
<td>USE5</td>
<td>REA5</td>
<td>CONDI5</td>
<td>EXP5</td>
<td>DURA5</td>
<td>RECOM5</td>
</tr>
<tr>
<td>Full length trousers</td>
<td>USE6</td>
<td>REA6</td>
<td>CONDI6</td>
<td>EXP6</td>
<td>DURA6</td>
<td>RECOM6</td>
</tr>
<tr>
<td>Gloves</td>
<td>USE7</td>
<td>REA7</td>
<td>CONDI7</td>
<td>EXP7</td>
<td>DURA7</td>
<td>RECOM7</td>
</tr>
</tbody>
</table>

**Q37 (question 37).** When purchasing pesticides, are you usually supplied with information on the pesticide, such as pamphlets or instructions, describing safety issues or procedures?

1 = Yes  
2 = No

**(QUESTION 38)** Please indicate the main source of the following information/instructions that you may have received and applied:

**Note:**

*There are 14 information/instruction in table question 38. Variable SOUR presents where the respondent received information:*

**Source of information/instruction:**

0 = Never heard before; 1 = NGO; 2 = Agricultural Official; 3 = Pesticide retailer; 4 = Pesticide companies; 5 = Public media; 6 = Other

**Variable APP are separated for detail practices information in different sentences**

<table>
<thead>
<tr>
<th>Information/Instructions</th>
<th>SOUR</th>
<th>APP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the labels on the bottle/package and follow the instructions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(if you cannot read, please get help from others who can read).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not mix pesticide with bare hands.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mix them with a stick.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>While mixing, wear hand gloves and glasses/eye shield.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>While cleaning the sprayer's nozzle do not place your mouth on it or blow on it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use thin wire for cleaning the nozzle.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before spraying pesticides take all precautionary measures such as wearing hand gloves, head cover, face shield, full sleeve shirt, full length trousers/pajamas, and shoes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not spray pesticides against the wind. Determine wind direction first and then spray.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Do not spray when it is windy. You must wear head cover and face shield while spraying in the upwind direction.

Do not eat or drink or smoke while spraying pesticides. The reaction may be toxic or even fatal.

Do not wash pesticide bottle or pesticide sprayer in the pond/canal/river.

Pesticides from the bottle or sprayer will contaminate the water of the pond/canal/river and will be dangerous/deadly for the fish, cattle, birds and people.

Wash and clean the sprayer and your clothes at a far distance from the pond/canal/river. Be careful so that this water does not contaminate any water body i.e. pond/canal/river.

After applying the pesticides on your field, display a signboard or red flag or use an empty pesticide bottle, so that everybody sees and understands that you sprayed pesticides on that field.

Do not let any children or domestic cattle or poultry birds enter into that field within 7 days of pesticide application.

Do not keep other things in the pesticide bottle or package. Do not keep pesticides in any bottle or package used for keeping food or medicine.

Tear up the pesticide package or break the bottle into pieces and then bury them under the ground. Then flag the area as containing buried pesticides.

Keep the pesticide under lock and key so that they are out of the reach of children. Do not keep other things or medicine where you keep pesticides. Keep the children and domestic cattle and poultry birds out of the immediate area.

In the event of an accident, provide first aid to the patient following the instructions on the label of that particular pesticide bottle. Take the patient and the pesticide bottle/package to the doctor as soon as possible.

Q39 (question 39). When you mix/use the pesticide solution, does the liquid come into contact with any part of your body?

1 = Yes 2 = No

Q391 (sub-question 39.1) If YES, which part?

1 = Hands 2 = Feet 3 = Other parts

Q40 (question 40) Do you take a bath right after spraying? 1 = Yes 2 = No

Q41 (question 41) Do you change clothes right after spraying? 1 = Yes 2 = No

Q42 (question 42) How long is it after application before you re-enter the field? (in days)

SOCIAL FEEDBACK:
Q43 (question 43). Some people believe that some farmers use pesticides that cannot be legally used in Viet Nam. I am not asking about you specifically, but in general do you believe that this could be the case in this village?

1 = Yes  2 = No

Q44 (question 44). When you buy pesticides, do you know if the particular pesticides are legal to use in Viet Nam?

1 = Yes  2 = No

If yes, ask the following question:

Q441 (sub-question 44.1) How do you know whether or not the pesticides are legal to use in Viet Nam? (brief statement of the respondent)

(question 45). When you buy pesticides, please indicate the degree of importance of each of the following criterion:

<table>
<thead>
<tr>
<th></th>
<th>1 = Very important</th>
<th>2 = Important</th>
<th>3 = Not so important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q451  Prices of the pesticides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q452  Efficiency of the pesticides to controlling pests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q453  The easiness to manipulate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q454  The quality of the explanation of how to use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q455  The legality of use in Viet Nam</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q46 (question 46). Suppose that a farmer (not you in particular) has the choice between two pesticides: one legal and one illegal. Suppose that the price of the illegal pesticide is much cheaper than the price of the legal pesticide. How many farmers do you think would buy the cheaper but illegal pesticide?

1. Most farmers  2. A few farmers  3. No farmers  4. Do not know

Q47 (question 47). Have there been any social actions against pesticide use in the past 5 years in your area?

1 = Yes  2 = No

If YES, please check all that apply:

<table>
<thead>
<tr>
<th></th>
<th>Q471 Procession</th>
<th>Q472 Campaign</th>
<th>Q473 Protest Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Never</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = A few</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Many</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = I don’t know</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ENVIRONMENT:

Q48 (question 48). Have you ever heard of any of the pesticide-related accidents below in your local area?

Q481 (sub-question 48.1) Water contamination: 1 = Yes 2 = No
Q483 (sub-question 48.3) Air contamination: 1 = Yes 2 = No
Q485 (sub-question 48.5) Death of fish, frogs, birds, etc: 1 = Yes 2 = No

PART III: INTERVIEWER DEBRIEFING QUESTIONS:

(To be filled out by the interviewer only)

Q49 (question 49). Are you certain that the interviewee was answering to the questions honestly and truly?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Uncertain</td>
<td>Moderately Uncertain</td>
<td>Neutral</td>
<td>Moderately Certain</td>
<td>Very Certain</td>
</tr>
</tbody>
</table>

IV CONSTRUCTED VARIABLES

The file name Mekong. Sav contains a number of constructed variables for analysis by SPSS. These variable generated from questions with multiple answers. Therefore, whenever there is a question with multiple answers there will be one, two or three constructed variables followed. The variables will be recognized by a Capital letter following the original variables. For example, variable Q221 is a multiple answers, then it is separated in to three variables: Q221 (answer choice1), Q221A (answer choice 2), Q221B (answer choice 3).

The following variables are generated from the origin variables:

1. **Q221**: Q221, Q221A, Q221B
2. **Q283**: Q283, Q283A
3. **Q2913**: Q2913, Q2913A
4. **Q2914**: Q2914, Q2914A
5. **Q2923**: Q2923, Q2923A
6. **Q2924**: Q2924, Q2924A
7. **Q321**: Q321, Q321A, Q321B
8. **Q323**: Q323, Q323A
9. **Q391**: Q391, Q391A, Q391B
10. **REA1**: REA1, REA1A
11. **RECOM1**: RECOM1, RECOM1A
12. **REA2**: REA2, REA2A
13. **RECOM2**: RECOM2, RECOM2A, RECOM2B
14. **REA3**: REA3, REA3A
15. **RECOM3**: RECOM3, RECOM3A, RECOM3B
16. **REA4**: REA4, REA4A
17. **RECOM4**: RECOM4, RECOM4A, RECOM4B
18. **REA5**: REA5, REA5A
19. **RECOM5**: RECOM5, RECOM5A, RECOM5B, RECOM5C
20. **REA6**: REA6, REA6A
21. **RECOM6**: RECOM6, RECOM6A, RECOM6B, RECOM6C
22. **REA7**: REA7, REA7A
23. **RECOM7**: RECOM7, RECOM7A, RECOM7B
24. **SOUR1**: SOUR1, SOUR1A, SOUR1B
25. **SOUR2**: SOUR2, SOUR2A, SOUR2B, SOUR2C
26. **SOUR3**: SOUR3, SOUR3A, SOUR3B
27. **SOUR4**: SOUR4, SOUR4A, SOUR4B, SOUR4C
28. **SOUR5**: SOUR5, SOUR5A, SOUR5B, SOUR5C
29. **SOUR6**: SOUR6, SOUR6A, SOUR6B, SOUR6C
30. **SOUR7**: SOUR7, SOUR7A, SOUR7B, SOUR7C
31. **SOUR8**: SOUR8, SOUR8A, SOUR8B, SOUR8C

32. **SOUR9**: SOUR9, SOUR9A, SOUR9B

33. **SOUR10**: SOUR10, SOUR10A, SOUR10B

34. **SOUR11**: SOUR11, SOUR11A, SOUR11B, SOUR11C

35. **SOUR12**: SOUR12, SOUR12A, SOUR12B, SOUR12C

36. **SOUR13**: SOUR13, SOUR13A, SOUR13B, SOUR13C

37. **SOUR14**: SOUR14, SOUR14A, SOUR14B

(Important note about number 'zero' in the SOUR variable: Zero in SOUR variable means: never heard before (as coded) , while 'Zero' in SOUR.A, SOUR.B, SOUR.C variables means 'missing values' only)

### V. COMPUTED VARIABLES

**INCOME**: total income of farm households as defined above

**AGE**: Age of the respondent, computed from BIRDAY

**AGECODE**: 1: <20; 2= 20-29; 3=30-39; 4=40-49;5=50-59; 6= 60 and over

**RIRATIO**: ratio of rice land over total land (computed as RICE/LAND)

**LANDCODE**: code of land size

1: <0.5; 2=0.5-0.99; 3= 1-1.49; 4= 1.5-1.99; 5= 2 -2.49; 6= 2.50 and over

**INCAP**: income per capita per year (computed as INCOME/MEMBER)

**CROPIN**: Ratio of income from crop over total income (computed as (INCO1/INCOM)*100)

**INCACODE**: income per capita per year CODE

**CODEq42**: Code for Q42

**END**

Ho Chi Minh City, 21 March 2004
Checked 24 July, 2004