1 Research Objective
To survey a nationally representative sample of the Chinese population (15+).

2 Methodology

2.1 Sample Population
Ca. 924 million people (population of the People China 15+ years old living permanently on Chinese territory, urban and rural; source China Statistical Yearbook 1998)

2.2 Sample Size
N = 6,224

2.3 Method of administering the survey
Face-to-face interviews in the respondent's home

2.4 Sample Representation
Sample is representative of the whole of the PRC and is adjusted according to proportions of (non-)agricultural population. For the purpose of the survey the national territory has been divided into 6 regions from North to South, including remote and rural areas. The sample will reflect the social and demographic structure of the whole China taking into consideration the following variables: gender, age, and education

2.5 Sample design
Multi-stage probability (cluster) sample of the national population of the PRC

3 Description of the Sample design
The sampling design targets 102 Primary Sampling Units (PSUs) across the country. On average, interviews were conducted in 4 (sometimes 3) rural and urban settlements in each PSU. In each of the ca. 408 targeted settlements ca. 15 interviews were conducted. Each sampling point thus represents about 3 million people, except for Beijing (10 million) and Shanghai (13 million). The sample is created using Kish's (1965) area probability methods for national surveys. The units of selection in this multistage cluster-sampling scheme are described below in decreasing order of generality.

1. In the first stage the primary sampling units (PSUs) are Prefectures (Di) or major cities/rural regions (Shi/Xian), with probabilities of selection based on their population size (PPS) and proportion of (non-)agricultural population. Since both Beijing and Shanghai are large and important settlements with more than 10 million inhabitants, they were automatically included.
2. In the second stage, the municipalities and rural areas within these PSUs were selected, again based on population size and on proportion of (non-)agricultural population. These were Sub-districts (the residential district in the municipality called Jei Dao) and Township (the residential grouping in the rural areas which are called Xiang/Zhen).

3. The units for the third stage of selection were the settlement targets of villages and neighbourhoods (selected randomly from the list of villages and neighbourhoods). In each of these first three stages sampling units had probabilities of selection which are proportionate to unit size (PPS).

4. In the fourth stage of selection, individual households were listed and randomly selected within villages and neighbourhoods.

5. In the fifth stage individual respondents were selected within these households. In these last 2 stages, households and individual respondents within households were selected randomly according to standard Kish procedures.

3.1 First Stage - Selection of Counties (PSUs)

a. Primary Sampling Units

For the assessment and selection of Primary Sampling Units (PSUs) it was possible to access a recent update of the demographic structure for each of the 664 counties of China.

The People’s Republic of China comprises 664 statistical units (SU). These include Beijing and Shanghai, 277 Shi, and 385 Xian (independent large counties). A county is a territorial unit which generally includes both municipalities and rural communities. The administrative centre of a county is usually (though not exclusively) the largest community in the district. If the administrative centre is a rural settlement, the entire SU is usually rural.

Thus these SUs represent the extremes of PSU types in China. Between these extremes are mixed types of administrative districts, including municipalities and rural settlements ranging from around a thousand to hundreds of thousands or even millions of people. If the population size of the district is less than the minimal PSU size of 60,000 people, then the district is linked with an adjacent district within the same stratum to form the district.

All 664 SUs are listed in a database containing the following information:

- 1 SU ID number
- 2 the code and name of its district
- 3 the administrative typification of its district
- 4 the population size of its district

This will not only allow accurate sampling but also the construction of weighting variables to ensure the representative value of the study.
b. Stratification of territorial units and administrative districts

All 102 SUs were grouped into PSUs before selection, with each PSU comprising several geographically adjacent districts of similar sizes. After being merged with other areas, the combining size of PSU was approximately 10 million people. Beijing and Shanghai have populations greater than 10 million and were thus considered as self-representing PSUs which were automatically selected in the first stage.

The other 100 PSUs were selected within each zone (see below). Each zone and PSU has a selection probability proportionate to its size (PPS). Therefore, each selected SU represents several counties of similar size and character, and each selected SU is given equal sample size in this survey.

As an example, from the list of SUs a point comprising ca 10 million people was selected. The first PSU was with the ID 1301 (Shijaizhang) was selected, followed by the second PSU (ID 1302), followed by the third PSU (ID1304) and so on.

The stratification of SU counties is based on two criteria: geographical location and the status of the county centre. Each SU county falls into one of the 6 economic and geographical zones into which China is divided by its statistical agencies.

These 6 regional zones divide the national territory of China:

| Zone 1 | Northern China:  
|        | Beijing, Tianjing, Hebei, Shanxi, Neimon |
| Zone 2 | North-Eastern China:  
|        | Shengyang, Jilin, HeilongJiang, Liaoning |
| Zone 3 | Eastern China:  
|        | Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, Shangdong |
| Zone 4 | Southern China:  
|        | Henan, Hubei, Hunan, Guangdong, Guangxi, Hainan |
| Zone 5 | South-Western China:  
|        | Sichunang, Chongqing, Gueizhou, Yunnan, Xizang (Tibet) |
| Zone 6 | North-Western China  
|        | Shangxi, Gansu, Qinhai, Xinjiang, Ningxia |

Five categories of settlements are classified using government statistics:

| 1 | Rural settlement  
| 2 | Municipalities with Non-Agricultural population between 60,000 and 200,000 people - Small city  
| 3 | Municipalities with Non-Agriculture population between 200,000 and 500,000 people - Medium-sized city  
| 4 | Municipalities with Non-Agricultural population between 500,000 and 1 Million people - Large city  
| 5 | Municipalities with more than 1 Million Non-Agricultural population people - Major city |
In cases where the above 5 categories did not permit the creation of PSUs containing ca. 10 million people, enlarged groupings of settlements were constructed. This combined in one stratum rural counties and counties with central cities of less than 60,000 people, counties with central cities between 60,000 and 200,000 people and counties with central cities of 200,000 to 500,000 people. In some cases, double-sized PSUs for counties with large population size were formed. These incorporate two units in the first stage.

c. The Sample Allocation
The sample is spread across the 6 geographical zones proportionate to the population size in that zone. Thus the number of PSUs in each region is directly determined by its population size.

d. The Selection of Counties and Selection Control
The primary sampling units of counties were thus selected independently in each geographical zone. The probability of selection for each county can be calculated by dividing the size of each area by the size of the PSU.

3.2 Second Stage - Selection of Urban and Rural Areas (Jie Dao and Xiang)
The second stage of the sample involves the selection of municipalities and rural districts within 102 administrative regions of the PRC. The sample was selected independently for urban and rural populations. The urban areas were selected in sub-district (that is the Residential district called Jie Dao) . The rural areas were selected in County (that is village settlement grouping called Xiang). Selection probability, once more, is proportionate to the urban and rural population sizes.

Municipalities are stratified by the 6-category settlement variable (see above). One settlement within each PSU was selected with the probability of selection proportionate to the size of the settlement. The rural districts were selected using the same procedure involving an available list of rural districts.

3.3 Third Stage - Selection of Neighbourhood/Village
A different selection procedure was used for municipalities and for rural districts in the third stage of sampling. China’s grass-root structure contains Neighbourhood Committees (for every 100 to 700 households) and Village Committees in the rural areas. A complete list of Neighbourhood Committees and Village Committees was used to select the settlement which participated in the survey. Each PSU which had been selected in the second stage had 3-4 allocations to be selected. Finally, there were 408 Neighbourhoods/Villages selected as target areas.

3.4 Fourth Stage - Selection of Households
After selecting Neighbourhood/Village, interviewers were asked to compile lists of all accommodation in each target area. Furthermore, interviewers designed maps of target areas outlining the location of all housing and describing types of dwelling usage (i.e. living/non-living). Interviewers proceeded by selecting target households via a random route procedure.
3.5 Fifth Stage - Selection of Respondents
In the fifth stage of the sampling process a particular respondent was selected within each household. The interviewer first listed all members of the household above the age of 15 starting with oldest male. Beyond the 15+ core family, any relatives or people who rent rooms in the household were included. Interviewers then selected a household member according to the Kish routine and the interview begins. A system of three call-backs for unavailable respondents was operated and there was no substitution for unwilling respondents within the same household. Non-response was specially registered.

4 Training
All interviewers frequently receive training in the methods of representative survey work, selection procedures, interview techniques, etc. In addition, Oxford Research International ensured that the specific issues of the study were efficiently communicated with the fieldwork staff. The supervisors were trained and then in turn they trained the interviewers. Training sessions included mock interviews besides a thorough explanation of the questionnaire. All interviewers received a written outline of the concept of this study, together with a collection of special vocabulary and instructions where necessary.

5 Quality Control
All questionnaire were checked by the supervisors for each sampling point and field managers for each PSUs. 15% of the respondents were directly contacted after the interview to check whether the interview had taken place and whether the interviewer had followed the instructions (s)he had received regarding selection criteria and interview manner.

Oxford Research International operated its independent quality control. The work of supervisors and interviewers in 10 different provinces was independently checked. No major problems were encountered.

6 Response Rate
12,415 households were selected and 6,224 interviews were successfully carried out. In total 84.6% of the selected households were contacted successfully, i.e. someone answered the door. In 21.3% of the contacted households interviews failed because the interviewer was not allowed to enter the house, the target person was not available in any of the three call backs, or the selected person refused to be interviewed. Further reasons for failed interviews were:

- during the interview the respondent judged the questionnaire too long and refused to answer any further question
- during the interview the respondent judged the questionnaire too sensitive and refused to answer any further question
<table>
<thead>
<tr>
<th>Province</th>
<th>Number of selected household</th>
<th>% households contacted (contact rate)</th>
<th>% target people who refused to be interviewed (refusal rate)</th>
<th>Successful interviews</th>
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<tr>
<td>XinJiang</td>
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<td>70.0</td>
<td>20.0</td>
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<td><strong>Total</strong></td>
<td><strong>12,415</strong></td>
<td><strong>84.6</strong></td>
<td><strong>21.3</strong></td>
<td><strong>6,224</strong></td>
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Technical Specifications

- Total population: ca. 1,230 Million
  (source China Statistical Yearbook 1998)
- Selection Criterion: 15+ years of age
- Sample Population: ca. 924 Million
  (source China Statistical Yearbook 1998)
- Sample Size: 6,224 Respondents (before weighting)
  (interviewed face-to-face in the home)
- 408 Sampling Points
- Ca. 410 Interviewers
- Fieldwork November/December 1998
Sampling

- Multi-stage random probability sampling design
  - 1st Stage: Selection of counties (PSUs)
  - 2nd Stage: Selection of urban and rural areas (Jie, Dao and Xiang)
  - 3rd Stage: Selection of neighbourhoods/villages
  - 4th Stage: Selection of households
  - 5th Stage: Selection of respondents (Kish)
- Up to three call-backs for unavailable respondents
- No replacement of unavailable respondents within the same household
- Nationally-representative sample
  (Weighting according to interlocking age/gender/urban-rural matrix)