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Major issues in developing the South African time use classification

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# Major issues in developing the South African time use classification

Prepared by Debbie Budlender, Statistics SA Expert Group Meeting on Methods for Conducting Time-use Surveys New York 23-27 October 2000

#### Introduction

This paper describes the South African experience in testing the trial expert classification of activities of the United Nations (UN) statistics division as amended by the expert group meeting of 1997, and as further amended by our Statistics SA time use team. The paper focuses on why we made certain decisions, and some of the problems we encountered in implementing them. From the outset we must acknowledge our debt to the ongoing email and face-to-face discussions with the UN statistics division staff on the challenges we faced along the way. We also had useful input from the ILO statistical division and from other participants in the Ahmedabad seminar of December 1999. But we must also point out that we did not always take the advice of others.

We hope that our experiences - both successes and failures - can help to take forward what we think is a good start to an international classification that could be used far more widely. In this paper we dwell on the difficulties. Overall, though, it was staff in head office who saw these difficulties. The fieldworkers who used the classification seemed to experience few problems.

## **Motivation for the study**

The South African time use study is being conducted by the national statistical agency, with financial and technical assistance from Norway. Because the official government agency is responsible for the study, there is a strong motivation to provide information which is useful for policy purposes. The timing of the study – only a few years after the first democratic elections which signaled the end of apartheid - provides a particularly receptive context in that there is widespread interest in policies, and especially those which address previously neglected issues and people. In time use studies in the developed countries the unpaid reproductive work which occurs in homes and leisure have been of central interest. In South Africa - as in other developing countries such as India - we are very interested in what the time use study can tell us about undercounted parts of the productive economy as well as about unpaid reproductive work.

## **Description of the international classification**

The classification developed by the expert group had two underlying principles. The first was to ensure comparability with other time use classifications. This is important so that we can see in what ways each country, and groupings such as developing compared to developed, differ from each other. The second principle was to be

compatible with the conceptual framework of the System of National Accounts (SNA) which underlies measurement of gross domestic product (GDP). The second principle would allow the data to be used to construct the satellite accounts recommended in the SNA specifications of 1993.

The SNA framework distinguishes between three categories:

- SNA activities: 'Productive' activities which are included in calculations of the GDP. This includes activities in both the formal and informal economies. In this category, we hoped that the time use study would point out areas that we were undercounting and particularly those in the informal economy. The category also covers fetching fuel and water, time-consuming activities which are thought to account for significant amounts of the time of rural women and children.
- Extended-SNA activities: 'Productive' activities which are outside the production boundary as defined for national accounts purposes. This covers unpaid reproductive work such as housework and caring for others. In this category we wanted an estimation of the time and value of the work, as well as the extent to which different groups gender, age, etc contributed.
- Non-SNA: These are 'non-productive' activities which can be defined by the third-person principle i.e. they are activities which another person cannot do for you. This was the area of least immediate interest to us as a government agency.

These three groupings between them span ten 1-digit categories, as follows: *SNA* 

- 1 Work in establishments
- 2 Primary production not for establishments
- 3 Other production of goods and services not for establishments *Extended SNA*
- 4 Household maintenance
- 5 Care of persons in the household
- 6 Community service to non-members

Non-SNA

- 7 Learning
- 8 Social and cultural
- 9 Mass media use
- 0 Personal care

Categories 4-0 are relatively similar to many classifications used in developed countries. It is in the first three categories that the major differences between this classification and others arise.

In most developed countries time at work is treated largely as a black box. The respondent is not required to list the different activities undertaken during work hours. They state at the most whether they were involved in a primary or secondary job. In the trial classification there is an attempt to provide more detail about work. This is, however, done unevenly. Category 1, which covers work in establishment, follows quite closely common sub-categories of developed country classifications. Categories 2 and 3, which more or less reflect the informal sector, go into some more detail. The work categories remain a black box to the extent that they do not differentiate between different activities undertaken during the time a person is working. What they do

specify more clearly than the previous classifications is the type of work in which a person is engaged.

### What we modified and the problems that remained

We adapted the classification in several ways to address what we say as weaknesses. Our adaptations did not address some of the underlying weaknesses. In this section we discuss the adaptations and why we made them. We also discuss the weaknesses which we did not address with amendments.

#### The work categories

#### First and second jobs

We abandoned the distinction between first and second job in the establishment category. The first and second job distinction is one that was borrowed from the classification of developed countries, as are many of the other sub-categories in the establishment work category. We abandoned the distinction for several reasons. Firstly, previous surveys have suggested that only a very small proportion of South Africans have two jobs in the sense of one employee job and another self-employed. The surveys do not test for two or more employee jobs or two or more self-employed jobs. Further, as most formal employee work in South Africa is full-time, and most workers are employees, relatively few people will have two formal jobs in establishments. (This may, in fact, be changing with a growth in 'atypical' forms of work in the formal sector.)

Secondly, in the case of multiple self-employed jobs in what is referred to as 'multiple livelihood strategies', these are more likely to occur outside establishments and the trial classification does not make the first/second job distinction here. The preliminary data of the first tranche suggests that more people than expected engage in more than one type of SNA activity in a week, or even in a day. But many of these overlaps involve subsistence type work or running a small informal business.

Finally, we were not convinced that most people would be able to say which was primary and which secondary.

#### What is an establishment?

While rejecting the first/second job classification, we wanted more information about establishment jobs than provided by the black box approach of category 1. Our solution was to use the first sub-category for status in employment. The simple 110 for work in first job in establishments was replaced by five 3-digit codes as follows:

- 111 Wage/salary work for establishments
- 112 Outworker work for establishments
- 113 Domestic work for private household
- 114 Unpaid work in an establishment
- 115 Work as employed in establishment

The 120 code for work in second job was dropped completely.

The idea of using status codes was borrowed from the original trial classification before it was amended by the expert group. We had used the original classification in our preliminary tests and found this aspect of it seemed to work well. We therefore chose to retain it into the expert version.

Our solution is imperfect because it mixes concepts i.e. that of activity and that of status. Also, one could argue, our demographic questionnaire provides information about status in employment. (The latter is not true where the person engages in more than one type of economic activity.)

Our approach was imperfect. It does, however, provide some advantages. Firstly, it allows one to distinguish between the often very different people who engage in domestic worker, other employee, employer and other types of work. Secondly, together with the single status of employment question in the demographic questionnaire, it provides an opportunity for picking up on some multiple job activity where the demographic and diary statuses do not coincide. Alternatively, such mismatches could indicate miscoding of one of these two relatively difficult codes.

Our second modification related to definitions. 'Establishment' proved a major stumbling block. The classification and documentation did not explain that this was a problem area, but UN staff acknowledged this when we asked for clarification. We learned recently that the distinction was developed so as to distinguish between formal (category 1) and informal (category 2 and 3) work. However, the term 'establishment' has a specialised meaning in national accounts and related statistics which does not match neatly with the formal/informal distinction. In trying to clarify our approach we were strongly influenced by the national accounts approach.

One major discrepancy is between the trial classification and national accounts approaches are that private households which employ domestic workers are classified as establishments for national accounts purposes, while unpaid domestic work is generally regarded as informal. In the trial classification paid domestic workers are, it seems, meant to be classified in category 3. We chose to include them in category 1, as one of the types of workers in establishments. With close to a million domestic workers in South Africa, this decision should significantly influence our category breakdown.

A major difficulty in trying to match the formal/informal distinction is that, operationally, there are several ways in which this is done in statistics. The formal definition states that enterprises in the informal sector are household enterprises, which do not have an accounting system separate from that of a household. Operationally, however, it is difficult to find a way of implementing this definition reliably in surveys.

Instead some countries (such as South Africa), have taken registration with national government as the critical factor in distinguishing whether an enterprise is formal or not. Other countries base the distinction on the number of employees in a given workplace. The registration approach is a problem when there are multiple forms of registration, as is increasingly the case in South Africa and in many other countries. The number of employees approach is a problem to the extent that professionals such as accountants, doctors, and computer people who work from their own homes would

be classified as informal, whereas the trial classification team proposed that their activities fall in category 1.

Our chosen approach for time use was closer to the national accounts definition than the formal/informal one. The manual defined 'establishment' as follows:

An establishment is defined as a fixed structure (for example, a shop, office, factory mine) in which production of goods and service is carried out on a regular basis. It includes commercial farms. It includes private households when they are employing domestic workers. Usually establishments will have regular employees working in them, while non-establishment work (categories 2 and 3) does not involve regular employees.

Our definition thus drew the idea of a distinguishable physical entity, as well as the idea of number of workers.

We encountered only one definite problem with our approach, but attribute this to weaknesses in the training rather than with the concepts. At the end of the first tranche we discovered that two provinces, of which the fieldworkers had been trained together, were consistently coding paid work on commercial farms as category 2. We were able to correct this during the cleaning of the data, and in training for the second tranche.

We cannot say with any certainty what other problems were caused by our definition. There will certainly be many individual cases in which activities have been incorrectly coded between categories. We do not have the evidence to report clear patterns of errors. However, there are at least two reasons why work as an employee was probably sometimes coded as formal work even when it was in an informal business. The first reason is that there is a widespread perception that equates informal work with self-employment. The second reason is that we allocated one sub-category in the category 1 explicitly for wage work while there was no similar explicit sub-category in the other two economic categories.

#### Paid and unpaid

For our early tests we included a contextual variable where we indicated whether each activity was paid or unpaid. We dropped this variable when we discovered that the amended international classification distinguished between economic and non-economic activities as this was our primary motive in making the distinction in the first place. Our experience in the early tests – confirmed by experience in tests conducted by the US Bureau of Labour Statistics – is that the paid/unpaid distinction is often misunderstood to relate only to the period in which money changes hands rather than all time spent on activities which will ultimately generate income. Even with the trial classification we had to explain carefully that when a woman goes to market to buy chickens which she later cooks and sells, the activity of going to market is part of her economic activity rather than a house hold purchase.

#### Uneven treatment in sub-dividing work categories

As noted above, a problem with the three work categories is the inconsistent treatment of category 1 activities when compared with categories 2 and 3. In an effort to counter the bias of developed country classifications, which can be read as assuming a formal sector job, the trial classification provides much more detail on informal than on formal work. For example, the third category distinguishes between food processing and preservation, preparing and selling food and drinks, making and selling textiles, building, and trading. The second category distinguishes between crop and animal farming, and a range of other activities. Time spent at work in formal jobs is, as in developed countries, a black box. Time spent in informal jobs, on the other hand, provides some indication of the type of activity e.g. production, services or selling and primary, secondary or tertiary.

In training we paid quite a lot of attention to the different divisions within category 3 as we ourselves had found them confusing during the preliminary tests. We were confused, for example, about a person sewing clothes for their household – whether this was production (which it should be), or something else given that it was not sold. The explanation of the relevant code (330) is 'making and selling textile, leather and related craft'. This is confusing in that could be taken as meaning to produce AND sell.

The difference between 310 (food processing), 320 (preparing and selling food and beverages), 330 (making and selling textiles) and 350 (petty trading) was confusing and evoked a lot of debate. After pointed training fieldworkers seemed to grasp the distinction that the first codes involve something beyond selling, while 350 is simply selling.

The uneven treatment introduces other anomalies. For example, there is a code for work search for a formal job, but no code for work search in respect of informal activities. This is a bias which we are currently attempting to address in our labour force and other household surveys and which needs to be addressed in the classification as well.

Similarly, there is a code for 'break from work' in category 1, but not in category 2 or 3. The break from work code makes sense if one is interested in paid work hours to the extent that South African labour legislation specifies that the compulsory lunch break after five or fewer hours is not to be regarded as part of paid hours. This is how we explained it in training. It is, however, unlikely that either fieldworkers or respondents applied this consistently in respect of lunch breaks but not - as would be 'correct' - for paid tea breaks.

Our approach to the break from work code also does not make sense in time-use terms because we should, rather than break, be recording what the person did during the break. For example, the person may have been reading, eating, relaxing, shopping.

The initial form of the trial classification explained the 'break from work' activity as including tea breaks, training during work, seminars, receiving or making non-work related visits. It stated explicitly that the code should *not* cover lunch breaks. It said that lunch breaks should, instead, be coded according to the activity undertaken. It is unclear why the other breaks are not recorded as drinking (tea breaks), work-related

training (training and seminars), socialising (visiting or receiving visits) or simply doing nothing (relaxing).

#### Inclusion of non-SNA sub-categories

A third problem with the work categories is that the match with SNA is not perfect. For example, travel associated with each of the three SNA categories is included in the category although it would not, for SNA purposes, be considered as productive. Looking for work, too, is not a productive activity. The UN reasoning in including looking for work was that the activity classifies a person as economically active, although not 'employed'. This seems – as so many of the other problems – to be based in a mixing of conceptual frameworks.

Ideally, the travel and work-seeking activities should be reallocated in some way, although how to do this is not clear. One could, for example, create a travel category, with sub-categories which indicate which of the other categories each is associated with. It is, however, unclear where this travel category as a whole would fall in the three-part SNA division. The original trial classification had such a separate category, but this was abandoned on the advice of the expert group.

#### Fetching fuel and water

A slightly different problem arises in respect of fetching of fuel and water. The problem here originates in the international (statistical) approach to defining work rather than with the trial classification itself. The international approach considers fetching of fuel and water to be economic work, and says that those who do this work are 'employed'. The approach recognises that the work is productive and contributes value, but runs contrary to the commonsense understanding of most people. It is also not clear why fetching fuel and water should be viewed in this way when unpaid housework for one's own household is not.

The above by no means imply that we want to downplay the importance of fetching of fuel and water. The original trial classification provides a dedicated code (250) for collecting water, but includes collecting fuel in a generic code (230) for hunting, fishing and gathering of wild products and forestry. We created a special 3-digit code (236) for fuel gathering because of the importance of this activity in terms of time, gender division of labour and thus policy. We also agreed with UN staff that travel in connection with collecting wood, water and dung should be regarded as part of the activity rather than coded by the separate code of travel connected with the activity.

#### **Extended SNA activities**

#### Caring for children

The time use literature repeatedly notes that looking after children is under-reported in surveys. Where the instruments allow for primary and secondary activities, child care is usually relegated to secondary position. And it is widely suspected that much child care activity – especially where it involves supervision which occurs while the caregiver is doing something else – is not reported at all.

In an attempt to address this problem, we added a prompt question at end of diary, as follows: 'Did you spend any time during the day looking after children?' The three possible responses to this were:

- Yes, not mentioned all the times', in which case the person was directed back to fill in the extra child care activities in the diary
- 'Yes, already mentioned all the times'; and
- 'No'

Activities added after going back had a different third digit (2 rather than 1) to activities mentioned spontaneously when first filling in the diary. The childcare codes which were adapted to reflect spontaneous or prompted mention were:

- 511/2 Physical care of household's children: washing, dressing, feeding
- 521/2 Teaching, training and instruction of household's children
- 531/2 Accompanying household's children to places: school, sports, lessons, etc
- 561/2 Supervising children and adults needing care
- 671/w Caring for non-household children

During training there was some discussion – and often disagreement – as to what constituted looking after children. There were some strong feelings on the topic, particularly from the women fieldworkers, with some seeing supervision as caring, and others seeming to say this was simply part of life.

The results of the first tranche suggest that we had some success in picking up child care which would otherwise have been missed. We found that 3% of respondents said that they had not mentioned all the occurrences of child care, 16% said that they had mentioned all the times and 79% said they did not do any child care. While the 3% at first glance seems small, it is relatively high when compared to the 16% who mentioned all occurrences spontaneously. Further analysis according to time spent rather than respondents will, of course, change these percentages.

The percentages recording childcare were, as expected, different for men and women. 2% of men and 6% of women said they had not mentioned all occurrences of child care, and 5% of men compared to 25% of women did childcare but said they had mentioned all the occurrences. This left 91% of men and 68% of women with no recorded childcare activities.

Our interest in child care as a policy issue prompted a further change in the classification system. The trial classification would put care of a child from another household under 670, 'other informal help to other households'. We were keen to be able to separate out the child care from other types of activity in this category. We thus sub-categorised as follows:

- 671 Caring for non-household children, mentioned spontaneously
- 672 Caring for non-household children, not mentioned spontaneously
- 673 Caring for non-household adults
- 674 Other informal help to other households.

One complication in terms of childcare – or indeed care of any family members – is where this is done in respect of both household and non-household members. Category 5 activities cater for services rendered for household members. Category 6 activities cater for services rendered for non-household members. With child care, in particular,

it is common for someone to care simultaneously for both household and non-household members. Our rule here was that this should be coded as one activity, and that the household code took precedence over the non-household code. This is commonsense to the extent that a person will usually be looking after the child of another household primarily because that child is playing with the household child.

A related complication is the mismatch between the terms 'household' and 'family'. With agreement of the UN team, we changed the original wording of the trial time use classification from 'own children' to 'household's children'. For the purposes of household surveys, Statistics SA defines a household as those people who stay in a common dwelling unit for at least four nights in a week, and who pool resources or 'eat from the same pot'. This definition does not coincide with that of family. There can, for example, be non-related people in the household. This phenomenon could become increasingly common in respect of children with the increase in the number of HIV/AIDS orphans. Alternatively, there can be close family members living in a different household.

In many cases in the latter situation a woman may leave her child with her own mother, who lives in a different household, when she goes to work. In terms of time use coding, the activity of the grandmother would fall in category 6 (community services and help to other households). It is likely that this was miscoded in some instances. We will be able to do some checking of this by checking for category 5 childcare in households which report having no children.

#### Shopping

In the first version of the UN classification, shopping was major category with subcategories. The expert revision left shopping as a single sub-category (530) in the household maintenance category code. We added a sub-category 531 for 'shopping for government services'. Our concern was the long hours spent by old people waiting in pension queues. In practice, we are not likely to pick up much on this activity as it occurs on one or two days of the month.

A further difficulty with our amendment relates to the cutoff between government and non-government services. Firstly, there is the problem of parastatals and privatising government services such as the telecommunications provider. Secondly, many respondents will not necessarily know whether the provider is government or non-government.

There were also conceptual differences as to what constituted 'shopping' when one is talking about government services. For attending a court case as accused, witness or observer the UN team suggested 660 – involvement in civic and related responsibilities. We, on the other hand, regarded it as shopping – accessing government services – at least in respect of accused. For the witness it would be 660. But we were not sure about the observer. It could be help to another household (674) or even spectator sport (870)! During the training fieldwork one of the trainees encountered the situation of a person on parole who visited or was visited by the social worker. We decided this was accessing government services.

Another problem with shopping was where the exchange was very short, for example someone buying an orange at a soccer match. We decided that this should be coded as shopping if it was mentioned even though the time would be short. The problem of activities of short time-span is discussed further below.

#### Other extended SNA issues

During pre-tests in an informal settlement and rural area in late winter we recorded significant amounts of time spent heating water, making fires and chopping wood. We decided to add a new code which was intended to cover activities necessitated because the household did not have access to electricity. In implementing this approach we encountered some margin problems where, for example, a person was making a fire that would be used for boiling water for both washing and drinking purposes. We nevertheless felt that the distinction could be useful for policy purposes.

#### Non-SNA activities

#### Socialising

During one of the early tests we encountered a situation where a respondent travelled to visit an uncle to obtain advice on a family problem. After thought, we decided that the consultation involved socialisation, but that we wanted to distinguish family from non-family socialisation. We therefore sub-divided the socialisation code into three sub-codes. Although we did not stress this point much in training, the decision to use the word 'family' rather than 'household' when distinguishing these codes was a conscious choice:

831 Socialising with family

832 Socialising with non-family

833 Socialising with both family and non-family

A second issue which arose during pre-tests was how to code drinking when it occurred as part of socialising, for example in a shebeen (local pub). We decided to code it as two simultaneous codes. Our decision could result in quite large amounts of time spent drinking and eating. In analysis we expect men to have longer times than women. We should be able to measure the effect of our decision to some extent by separating occasions where eating and drinking occur simultaneously with socialising and those where they do not.

During training of fieldworkers a further query arose in relation to socialising. One of the young male fieldworkers asked how one would classify domestic violence - from the perspective of both the perpetrator and the victim. We decided that this was socialisation (with family) in that socialisation could be both positive or negative. Some of the group were unhappy with the decision and we agreed that, where a fieldworker came across these 'activities' they should note the point on the questionnaire. This has not happened - more because people are unlikely to note this activity than because it is rare in South Africa.

A fourth query on socialising concerned whether we should classify children who reported playing as playing or socialising given that their activities were often very

similar to those of adults. We decided to go on children's description rather than prompting.

We expanded the code for receipt of medical and personal care to distinguish between care provided by household members, and care provided by professionals and non-professionals who are not members of the household. Our three sub-codes are as follows:

041 Receiving medical and personal care from professionals (including traditional healer)

042 Receiving medical and personal care from household members

043 Receiving medical and personal care from non-household non-professionals

Resting we used only where there was no simultaneous activity. We felt that there would be inconsistency between people as to whether they said a particular activity was restful, even where the situations were very similar. We thus focused on the 'doing nothing' alternative. We later discussed that the Korean time use survey adopted a similar approach.

#### Rules for prioritisation

During the second tranche we had a query as to whether a person taking a child to school was 'accompanying a child' (code 531/2) or travelling related to child care (code 590). We wondered whether we should distinguish between those who walked with and those who drove the child to school, and/or between those who left the child immediately on reaching the school gate and those who stayed with the child for some time. The UN advice, which we accepted, was that child-related codes should take precedence over other codes, and that the mode of travel did not affect whether or not the activity should be regarded as accompanying. Another example of applying this rule was where we coded serving food to a child who was fed separately as 511/2 rather than the 410 used for serving food to family members more generally.

The examples above raise a broader issue of prioritisation. Prioritisation questions are not confined to time use classifications – they arise with most coding frameworks where one 'unit' (here an activity) could be classified by more than one code. Another example we had in the field was where a sangoma (traditional healer) was praying in the course of treating a patient. The question here was whether the activity was praying (non-SNA) or providing a service (category 3). We felt that the second option was correct in that it would be anomalous to treat a 'western' doctor's work as economic but traditional healing as non-economic. The generalisation of this reasoning is that an economic code would normally take precedence over a non-economic code. A third prioritisation example, which cannot be decided so simply with reference to the SNA categories or even the ten categories, is how to classify attending a wedding which is a religious affair. For this case the UN team suggested 810 (participation in cultural activities) rather than 820 (participation in religious activities).

#### Waiting

Prior to embarking on our time use study a team from Statistics Norway visited South Africa to discuss the proposed cooperation. During this visit we held time use workshops in three different cities at which we discussed possible approaches with people from academe, government and civil society. In all three workshops the question of 'waiting' came up spontaneously as people reflected on common South African activities that might not be reflected in classifications used in other countries.

The issue of waiting was discussed in the expert workshop (probably as a result by one of our Norwegian visitors). When we raised the issue with the UN, they advised that we use the third digit of the relevant code, but suggested that this be done only in relation to travel and access to basic services. We decided to use a third digit for all waiting mentioned by respondents. We know, however, that we will not pick up on even a fraction of waiting as people will often not mention it spontaneously. We also know that we will not pick up on a common form of waiting – queuing for the state old age pensions – as these are handed out on only a few days in each month.

## **Coverage of codes**

A simple frequency count on the data from the first tranche gives some idea of the spread of activities across the different codes. Firstly, it shows at least one occurrence of every single activity, including our added ones, on the coding list. Secondly, the following activities account for 5% or more of all activities:

- 010 (sleeping), accounting for 88 796 occurrences or 34% of the total
- 020 (eating and drinking), accounting for 14 623 or 6% of the total
- 030 (personal hygiene and health), accounting for 12 267 or 5% of the total
- 111 (wage and salary formal work), accounting for 15 056 or 6% of the total
- 410 (cooking etc), accounting for 12 152 or 5% of the total
- 920 (watching TV and video), accounting for 13 456 or 5% of the total.

The large number with code 111 provides support for our approach of sub-dividing the formal work category, but suggests that further sub-division might be good. The three categories 111 to 115 together account for 17 702 activities, or 7% of the total i.e. wage and salary dominates the formal sector work category.

The above figures exclude these activities when they have a special final digit indicating waiting (8) or imputation (7). We used imputation where a time period had no valid activities. We chose the 7 so as to be able to separate out (the relatively few) imputed activities during analysis. Our solution is imperfect as it does not allow us to distinguish between, for example, the three different kinds of formal paid work starting with 2-digit '11' code.

## **Operational issues**

The time use survey was implemented in South Africa through face-to-face interviews with respondents using background household and demographic questionnaires together with a 24-hour recall diary. The diary was divided into 48 half-hour timeslots. Each timeslot could accommodate up to three activities.

Fieldworkers were responsible for both interviewing and coding apart from coding of occupation and industry in the demographic questionnaires. Fieldworker filled in the activity codes in the evening after completing interviews. These were then checked by their team supervisors, and later by the provincial coordinators.

Statistics SA utilises part-time contract fieldworkers who are, for the most part, unemployed young people with a school-leaving certificate who come from the province in which they conduct interviews. For the time use survey the first round of fieldwork was preceded by four and a half days of intensive training. Each of the two subsequent rounds was preceded by two days of refresher training.

The activity coding was obviously a key component of the training. To assist fieldworkers we compiled a coding index in addition to the standard coding list. While the list enumerates codes and activities in order of numerical code, the index was arranged in alphabetical order of activities. To included in the index all activities recorded during the pilot test.

From observation and reportback it seems that the coding index was a useful tool. Particularly in the early stages fieldworkers referred more to the index than the list. We encouraged them then to cross-check in the list. Over time we hoped – and were proved right in many cases – that fieldworkers would get a better grasp of the underlying conceptual framework and rely less on the index.

One of the more frequent errors in diaries related more to recording than to coding. Frequently fieldworkers would record arriving, leaving, waking up or similar events as activities. We explained that these events were changes of states, more or less instantaneous, rather than activities. Nevertheless, the problem persisted to some extent.

A different issue arose with activities which would usually take far less than 30 minutes, such as going to the toilet or making a short phone-call. We realised from the pre-tests that going to the toilet is a much more time-consuming event – and more likely to be mentioned – for those who do not have a toilet in the dwelling. We also know that telephone calls can go on for a very long time.

Our rule for these activities was that the fieldworker should record them if they were mentioned, but should also prompt if this was the only activity mentioned in a 30-minute slot. We hoped that the times for these activities will average out in analysis as they will be exaggerated for some people, but not mentioned for many others.

Some fieldworkers wanted to prompt for going to the toilet as we had advised prompting when people did not mention having eating two or three times during the day, or did not mention having got dressed after waking and before leaving the dwelling. We discouraged prompting for toilet activity!

The duration of activities could be relevant in designing a classification system. The UN suggests that the trial classification be expanded to the three-digit level, either by individual countries or internationally. For countries, like South Africa, which are using a long timeslot for the diary because of problems of literacy, numeracy and time-awareness, such fine detail may not be appropriate.

#### Other countries

The brief for this paper was to report on South Africa's experience of using the trial international classification. This last section contains a few brief thoughts on experience and approach beyond South Africa. They are included because what the others cited here have written and done has influenced our understanding of classification problems.

Few other countries have used the international classification to date. In particular, India and the US both decided against the trial classification despite the participation of Indian and US experts in the expert group. Clearly the decision on a classification is not made by a single individual. But it is nevertheless interesting to look briefly at the reasons why each of these countries did not adopt the trial classification.

The US, it seems, was keen to use a methodology which had been tried and tested in the developed world. After examining a range of classifications, they have chosen to use the Australian model. The US does not have a history of national time use studies. They therefore do not need to be concerned about breaking time series. Their response suggests that the trial classification might not be responding to what first world designers see as the primary purpose of the time use study. In particular, it suggests that they may not have the same concern about undercounted elements in the labour market.

India presents the opposite end of the spectrum. Greater understanding of the labour market was - as in South Africa - one of the primary aims of their large pilot study. However they felt that the trial classification did not provide adequate detail on the different form of economic activity, and particularly economic activity. They were also, like us, unhappy about the centrality of the concept of 'establishment'.

One concern in India was that the presence or absence of an establishment relates to the enterprise rather than the worker. The enterprise focus matches the approach used in national accounts and estimating values. The Indian concern matches the idea that we should talk about 'informal economy' rather than 'informal sector' and so capture, for example, those who do casual and other informal type work for formal establishments.

A second Indian concern was the definition of establishment as a "fixed structure and large holdings irrespective of industrial sector of the activity" [we could not find this definition in the documentation]. Hirway (1999) notes that this definition is "confusing and also not relevant and valid for developing economies". For example, if the term "large holding" is intended to provide for those who sell their products, it misses small, but market-oriented, peasant holdings.

India therefore retained the three-way SNA division, but replaced the first three SNA categories of the trial classification by primary, secondary and tertiary sector activities. The activity codes were supplemented with two contextual variables – inside/outside and paid/unpaid. The latter reportedly, as in the US and in our pilot, created problems.

The ILO presented a fairly radical alternative to the trial classification at the expert group meeting. The ILO classification has never been tested in the field and has not been fleshed out. It is nevertheless important in clarifying some of the conceptual jumps and gaps in other activity classifications. The expert group rejected the ILO approach because of its lack of comparability with previous classifications. The ILO team suggest that comparability is possible.

While the trial classification attempts a match with SNA categories, the ILO classification draws on the standard occupational categories as a basis. This has similarity with the Indian approach where work is divided down into a number of tasks, although the ILO draft classification is much more aggregated. What could be a problem with this approach is how one classifies a person who has one occupation but undertakes an activity at work which is more typical of another occupation.

Overall, it is likely that an exact match of an activity classification with any other conceptual classification is unlikely to be achieved. The current UN trial classification certainly has some conceptual gaps and leaps which need to be addressed. But even when 'corrected', we will probably always be asking interesting questions about how different classifications intersect, rather than finding an exact fit.

Further, for a country like South Africa which relies on contract fieldworker-coders with relatively limited education, we need to ensure simplicity and a match with commonsense perceptions of how the world works alongside conceptual clarity.

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