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## CHAPTER 3. DYNAMICS IN THE HEALTH SECTOR: 2002-2004

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### Introduction

The health sector in Madagascar has gone through some significant policy changes over the last years. The most important ones were related to its financing. Madagascar had a strict cost recovery policy (PFU – Participation Financière des Usagers) until the middle of 2002. In the aftermath of the political crisis, a free drug policy was implemented in an attempt to mitigate the effects of the crisis. This was in the beginning of 2004 replaced by a new cost recovery policy (Fanome - Fandraisan'Anjara No Mba Entiko) with special provisions for the poor through a health card system.

To evaluate the impact of the policy changes on the health sector, a primary survey was organized in October/November/December 2004 in 300 communes. In each commune, a focus group, representative of the population of the commune, was gathered and interviewed. The health center in every commune was also visited and the personnel of the center was asked to help to fill in the survey. The methodology was similar to the post-crisis survey in 2002 (Ilo program, 2003) and allowed therefore for the comparison of the situation between these two years.

Given the higher population in the capitals of provinces, more centers were visited in the urban communes. Table 1 illustrates the different type of health centers that were surveyed. They overwhelmingly include CSB2 (84% of the centers). 10% and 90% of the centers were located in urban and rural areas respectively. 324 health centers were surveyed for the country as a whole. 34 were located in urban areas.

Table 1: Structure of the sample

| Type                | Province   |                  |
|---------------------|------------|------------------|
|                     | Number     | Number           |
| CSB1                | 20         | Antananarivo 78  |
| CSB2                | 272        | Fianarantsoa 73  |
| CHD1                | 12         | Toamasina 55     |
| CHD2                | 5          | Mahajanga 36     |
| CHU                 | 1          | Toliara 54       |
| Private hospital    | 3          | Antsiranana 28   |
| Private dispensaire | 8          | Urban 34         |
| CHR                 | 3          | Rural 290        |
| <b>Total</b>        | <b>324</b> | <b>Total 324</b> |

Source: Commune survey, 2004

Using these recent data, this chapter discusses the state of the health sector in 2004 as well as dynamics between 2002 and 2004. Given the set-up of the sample, we will present statistics for the overall sample, as well as at the level of the limited sample of 186 health centers that were visited in 2002 (Ilo program, 2003), as this will allow us to look at longer period dynamics.<sup>1</sup> The brief will discuss the evolution of the number of visits to health centers and the perceived quality of care, the changes in the supply and the demand factors and the perceptions of the local communities on the situation and the problems in the health sector. We finish with the conclusions.

### 1. Performance indicators and perceived reasons for change<sup>2</sup>

#### 1.1. Number of visits to health centers

*a. The average number of visits to health centers in 2004 decreased by almost 30% compared to the same period one year earlier.*

Health centers were asked about the number of weekly visits to the health centers at the time of the survey (October-December 2004). They were asked the same numbers for the period May-June 2004 as well as for November-December 2003 (Table 2).

When the period May-June 2004 is compared with the end of the year 2003, an average decrease of 13% is noticed. Such a decrease is typical for health center visits as there is high seasonality in the prevalence of diseases, i.e. they are higher in the rainy period (Ilo program, 2003; Waltisberger *et al.*, 1998).

The more relevant comparison is then between the end of 2004 and 2003. In this case, we notice an average decrease at the national level of almost 30%. However, the decrease was not

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<sup>1</sup> Some caution in interpretation is warranted as we did not control for the panel element and issues of sampling might drive some of the explanations for change. This will be corrected later in more detailed analysis to the extent that this is possible (as there are some coding problems).

<sup>2</sup> Given the methodology used, we can not use the preferred performance indicators, i.e. the health status of the population. We have to rely on measurable indicators that are simple to collect. The number of visits is such an indicator.

uniform for all centers: 71% of the health centers noted a decrease, 22% observed an increase and for 7% of the health centers, the number of visits was stable compared to one year earlier.

Table 2: Weekly number of visits to health centers

|              | Unit          | Nov-<br>Dec<br>2003 | May-<br>June<br>2004 | Oct-<br>Dec<br>2004 | Change<br>2003/04<br>(%)* |
|--------------|---------------|---------------------|----------------------|---------------------|---------------------------|
| <b>Total</b> | <b>Mean</b>   | <b>191</b>          | <b>165</b>           | <b>136</b>          | <b>-29.8</b>              |
|              | <b>Median</b> | <b>84</b>           | <b>69</b>            | <b>60</b>           | <b>-28.6</b>              |
| Urban        | Mean          | 306                 | 258                  | 284                 | -7.2                      |
|              | Median        | 212                 | 147                  | 187                 | -11.8                     |
| Rural        | Mean          | 177                 | 154                  | 118                 | -33.4                     |
|              | Median        | 77                  | 65                   | 51                  | -33.8                     |
| Private      | Mean          | 417                 | 510                  | 479                 | +14.8                     |
|              | Median        | 59                  | 58                   | 62                  | +5.1                      |
| Public       | Mean          | 182                 | 153                  | 124                 | -31.9                     |
|              | Median        | 86                  | 70                   | 60                  | -30.3                     |
| Antananarivo | Mean          | 190                 | 155                  | 145                 | -23.7                     |
|              | Median        | 108                 | 87                   | 75                  | -30.6                     |
| Fianarantsoa | Mean          | 309                 | 268                  | 203                 | -34.4                     |
|              | Median        | 92                  | 76                   | 60                  | -34.8                     |
| Toamasina    | Mean          | 155                 | 118                  | 98                  | -36.8                     |
|              | Median        | 81                  | 66                   | 51                  | -37.1                     |
| Mahajanga    | Mean          | 153                 | 130                  | 110                 | -18.2                     |
|              | Median        | 82                  | 70                   | 67                  | -18.3                     |
| Toliara      | Mean          | 82                  | 84                   | 53                  | -35.4                     |
|              | Median        | 50                  | 32                   | 26                  | -48.0                     |
| Antsiranana  | Mean          | 231                 | 238                  | 214                 | -7.4                      |
|              | Median        | 64                  | 53                   | 41                  | -35.9                     |

\*: comparing November/December 2004 with November/December 2003  
Source: Commune survey, 2004

*b. The change in the frequency of visits differs by area and by type of center. Public rural centers show the highest decrease: visits dropped by one third.*

Table 2 further makes the distinction between urban/rural, private/public and provinces. The rural areas (-33%) have higher decreases than the urban ones (-7%) but this difference almost disappears when we look at public centers only (as most of the private centers that were surveyed were located in urban areas).

We notice a major difference between the private and the public centers. Public centers saw their number of visits decline by almost 32% while the private centers noticed an increase of 15%. It would be tempting to state that a shift from the public to the private sector has taken place and probably this has happened. However, as the number of private centers is much lower - especially in rural centers -, it is safe to conclude that the total number of visits to health centers has declined significantly in 2004 compared to 2003, and this especially so in rural areas.

The drop in visits is consistent across provinces (Map 1). It is highest in the poorest provinces of Fianarantsoa and Toliara (Razafindravonona *et al.*, 2001). It is lowest in the province of Mahajanga.

*c. The decrease in the number of visits depends on the type of service demanded. The biggest decrease is noticed for lab tests, chirurgic interventions, and c-sections.*

The health centers were further asked to evaluate the evolution of the number of visits by type of service. The biggest decrease is noticed for lab tests, chirurgic interventions, and c-sections (Table 3). We notice increases for interventions in prenatal care (+4%) as well as for the immunization of children (+26%). Prenatal care and deliveries stayed relatively stable. This is seemingly in part explained by the policy of some communes to only give birth certificates if children are born in the health centers.<sup>3</sup>

Table 3: Number of visits in 2004 in % compared to the same period last year (2003=100%)

|                                   |     |
|-----------------------------------|-----|
| Curative consultations            | 83  |
| Lab tests                         | 22  |
| Hospitalization                   | 63  |
| Important chirurgic interventions | 12  |
| Small chirurgic interventions     | 86  |
| Normal delivery                   | 94  |
| C-sections                        | 13  |
| Prenatal care                     | 104 |
| Immunization of children          | 126 |

Source: Commune survey, 2004

*d. The major perceived reason for the decrease in the number of visits to health centers is the increase in poverty.*

When asked for the reasons for the decline in visits, almost 40% of the health centers that noticed a decrease in the number of visits think that this is because patients can not pay the fees anymore (Table 4 and Map 2). 21% of the centers link it to lack of staff while another 21% state that it is the lack of drugs. 21% gave other reasons (Table 4). For those centers that saw an increase in the number of visits, it is mostly linked to an improvement of the quality of the service.

<sup>3</sup> The reduction in the delivery of hospital services (small and major chirurgic interventions, lab exams), for which prices were unaffected by the cost-recovery resumption, suggests that reinstating cost recovery without properly communicating that hospital services remained for free, might have deterred patients to go to the hospital.

Table 4: Reason for the change in the number of visits Nov./Dec. 2004 compared to Nov./Dec. 2003

|  | Number     | %         |
|--|------------|-----------|
| <i>If decline, most important reason for the decline in visits</i> |            |           |
| Lack of staff  | 45         | 21        |
| Lack of drugs  | 45         | 21        |
| Patients can't pay tariffs   | 80         | 37        |
| Other  | 46         | 21        |
| <b>Total</b>   | <b>216</b> | <b>67</b> |
| <i>If increase, most important reason for increase in visits</i>   |            |           |
| Better quality of service  | 24         | 34        |
| Patients don't go to other centers anymore                         | 6          | 8         |
| Reduction cost of drugs  | 8          | 11        |
| Abolishment of consulting fees                                     | 10         | 14        |
| Increase of sensibilization  | 6          | 8         |
| Other (more sickness, ...)   | 17         | 24        |
| <b>Total</b>   | <b>71</b>  | <b>22</b> |

Source: Commune survey, 2004

## 1.2. Impact on the poor

*a. The perceived decrease in number of visits is the same for all income groups. However, as centers receive less visits, the rich are perceived to go to other centers while the poor rely more on automedication and traditional healers.*

As one of the objectives of the Poverty Reduction Strategy is to improve the situation of the poor, we asked some extra perception questions on their situation. We see little differences. The rich and the poor were apparently equally hard hit by the reduction of visits, as perceived by the personnel of the health centers (Table 5). However, patients are perceived to have different attitudes by income category. The rich are perceived to go to other centers while the poor rely more on automedication and traditional healers. This is consistent with previous research in Madagascar (Glick *et al.*, 2000).

Table 5: Number of visits by the poor (as perceived by staff of health center)

|   | The poorest | The richest |
|---|-------------|-------------|
| <i>Evolution of the number of visits post-crisis (with respect to the level of Nov./Dec. 2003) (100% = no change)</i> |             |             |
| Mean  | 76          | 70          |
| Median  | 75          | 80          |
| <i>In a case of a decrease, what do they do?</i>  |             |             |
| Go to another health center   | 15          | 75          |
| Auto-medication   | 44          | 15          |
| Go to traditional healer  | 37          | 8           |
| Other   | 4           | 3           |
| <b>Total</b>  | <b>100</b>  | <b>100</b>  |

Source: Commune survey, 2004

## 1.3. Perceived quality of treatment

*a. Focus groups estimate that the quality of health care in the commune improved compared to three years earlier.*

The focus groups at the communal level in rural areas were asked to evaluate the quality of the services that they received in the public centers and compare it to the situation of three years ago. Most focus groups evaluate the

service to be good. 62% of the focus groups think that the situation improved compared to three years ago (Table 6).

Table 6: Quality of services of public health center in the commune (perception by communal focus groups)

|              | Now - Nov/Dec 2004 % | Evolution over the last 3 years % |
|--------------|----------------------|-----------------------------------|
| Very good    | 5                    | A lot better 13                   |
| Good         | 51                   | Better 49                         |
| Average      | 31                   | The same 30                       |
| Bad          | 10                   | Worse 5                           |
| Very bad     | 1                    | A lot worse 1                     |
| Not relevant | 2                    | Not relevant 2                    |

Source: Commune survey, 2004

## 2. Changes on the supply side

To explain the changes in performance of the health sector, we will look at the supply and the demand side. We start with supply and we discuss changes in the availability of staff, drugs, services and budgets.

### 2.1. Availability of staff

*a. No major change was noticed in the availability of staff since one year earlier.*

The Ministry of Health was nationally staffed with 15,368 staff in 2004. This represented an increase of about 2% compared to 2003. Data were gathered on the evolution of the number of staff in the health centers in the period 2003-2004 (Table 7). A typical center has 1,5 doctors and 1,5 nurses and 1 midwife. The availability of doctors and nurses increased slightly while the number of midwives did not show any signs of change.

Table 7: Number of staff in health center

| Average number per center | Nov-Dec 2003 | May-June 2004 | Nov-Dec 2004 |
|---------------------------|--------------|---------------|--------------|
| Doctors                   | 1.48         | 1.58          | 1.58         |
| Nurses                    | 1.39         | 1.48          | 1.50         |
| Midwives                  | 0.98         | 1.00          | 0.99         |
| Sanitary help             | 0.68         | 0.70          | 0.70         |
| Temporary employees       | 1.79         | 2.00          | 2.01         |

Source: Commune survey, 2004

The average CSB2 serves a population averaging about 10,000 people. They are theoretically staffed with a physician since 1999 (World Bank, 2005). 24% of our CSB2 sample was not staffed by a physician. This percentage was lowest in the province of Antananarivo (7%) and highest in the more remote provinces of Mahajanga and Antsiranana (40%). This illustrates the challenge of the Ministry to attract doctors to live in these remoter areas (Table 8 and Map 3).

Table 8: Percentage of CSB2 where no physician is present

|                 | % of centers |
|-----------------|--------------|
| <i>Province</i> |              |
| Antananarivo    | 7            |
| Fianarantsoa    | 34           |
| Toamasina       | 22           |
| Mahajanga       | 40           |
| Toliara         | 14           |
| Antsiranana     | 40           |
| <b>Total</b>    | <b>24</b>    |

Source: Commune survey, 2004

While staff can be assigned to a health center, they can still be absent. There were many problems with absenteeism of staff during the time of the survey due to the national vaccination campaign 'HIAKA 2004'. This campaign mobilized a lot of personnel of the health centers and led partly to a drop in the frequency of visits to the health centers.

## 2.2. Availability of drugs

*a. The overall availability of drugs stayed the same compared to one year earlier but improved significantly compared to 2002.*

Table 9 shows how the availability of different drugs evolved between 2002 and 2004. Overall (a simple average of the most frequently used type of drugs) availability of drugs increased from 74% in 2002 to 91% in 2003 and 89% in 2004 (Table 8). The situation of 2002 was however an exceptional year as the survey was done five months after the end of the political crisis of 2002 and just after the introduction of the free drug policy. These two events led to a significant drop in the availability of drugs (Ilo program, 2003; Fafchamps and Minten, 2003). The re-introduction of cost recovery policies (Fanome) seems thus to have led to a better availability of drugs.

Table 9: Availability of drugs (in % of supply centers in the communes)

|                                 | Nov-<br>Dec<br>2002* | Nov-<br>Dec<br>2003 | Nov-<br>Dec<br>2004 |
|---------------------------------|----------------------|---------------------|---------------------|
| Oral contraceptives             | 75                   | 82                  | 86                  |
| Condoms                         | 67                   | 76                  | 77                  |
| Aspirine                        | 66                   | 86                  | 86                  |
| Paracetamol                     | 65                   | 97                  | 94                  |
| Solution de rehydratation orale | 78                   | 93                  | 90                  |
| Antibiotique amoxiciline        | 66                   | 95                  | 93                  |
| Antibiotique cotrimoxazole      | 71                   | 98                  | 97                  |
| Antibiotique penicilline        | 68                   | 93                  | 89                  |
| Antibiotique doxycycline        | 64                   | 68                  | 63                  |
| Antibiotique tetracycline       | 69                   | 96                  | 91                  |
| Antipaludiques                  | 82                   | 97                  | 96                  |
| Seringues                       | 73                   | 91                  | 89                  |
| Vaccin BCG                      | 86                   | 94                  | 93                  |
| Vaccin Polio                    | 87                   | 94                  | 95                  |
| Vaccin DTCoq                    | 86                   | 95                  | 96                  |
| Vaccin rougeole                 | 88                   | 93                  | 95                  |
| <b>Total</b>                    | <b>74</b>            | <b>91</b>           | <b>89</b>           |

\*: based on the 186 health centers surveyed in 2002 (Ilo program, 2003)

Source: Commune survey, 2004

There is little difference by type of drugs as the availability of most drugs improved. The only exception is the antibiotics doxycycline that showed a worsening in its availability over the last two years. Only 63% of the centers report to have it available. Oral contraceptives and condoms are also relatively less available. The enumerators also reported complaints about the sales of out-dated drugs (médicaments périmés) in the pharmacies. This concerned especially the drugs doxycycline and aspirine.

*b. There are little provincial differences. The availability of drugs is worst in the province of Antsiranana. The urban – rural gap that existed disappeared.*

There is little difference in the availability of drugs between different provinces (Table 10). The most remote provinces of Antsiranana and Mahajanga are doing relatively worse. The gap that existed between rural and urban areas in 2002 has now disappeared completely. The public centers had most problems with the availability of drugs in 2002. We thus see large changes in availability between 2002 and 2003/2004.

Table 10: Overall availability of drugs (overall = average of most frequent drugs mentioned in Table 9)

|                 | Nov-<br>Dec<br>2002* | Nov-<br>Dec<br>2003 | Nov-<br>Dec<br>2004 |
|-----------------|----------------------|---------------------|---------------------|
| <i>Province</i> |                      |                     |                     |
| Antananarivo    | 72                   | 89                  | 90                  |
| Fianarantsoa    | 70                   | 95                  | 90                  |
| Toamasina       | 78                   | 91                  | 91                  |
| Mahajanga       | 78                   | 86                  | 86                  |
| Toliara         | 77                   | 93                  | 93                  |
| Antsiranana     | 72                   | 86                  | 82                  |
| <i>Type</i>     |                      |                     |                     |
| Private         | 79                   | 77                  | 80                  |
| Public          | 74                   | 91                  | 90                  |
| <i>Area</i>     |                      |                     |                     |
| Urban           | 83                   | 89                  | 89                  |
| Rural           | 72                   | 91                  | 90                  |
| <b>Total</b>    | <b>74</b>            | <b>91</b>           | <b>89</b>           |

\*: based on the 186 health centers surveyed in 2002 (Ilo program, 2003)

Source: Commune survey, 2004

## 2.3. Availability of services

*a. The availability in the type of services offered changed little over the last year.*

Two thirds of the health centers have access to electricity (Table 11). Almost 90% of them use a fridge. Little change is noted on the availability of electricity and the use of a fridge as well as on the availability of services.

Table 11: Availability of services in health centers

|  | Nov-<br>Dec<br>2003 | May-<br>June<br>2004 | Nov-<br>Dec<br>2004 |
|--|---------------------|----------------------|---------------------|
| <i>Availability of electricity (%)</i> | 61                  | 62                   | 62                  |
| <i>Use a fridge (%)</i>                | 88                  | 89                   | 90                  |
| <i>Availability of services (%)</i>    |                     |                      |                     |
| Curative consultations                 | 97                  | 97                   | 98                  |
| Lab tests                              | 10                  | 10                   | 10                  |
| Hospitalization                        | 46                  | 46                   | 47                  |
| Normal delivery                        | 89                  | 90                   | 90                  |
| C-sections                             | 3                   | 3                    | 3                   |
| Prenatal care                          | 93                  | 93                   | 93                  |
| Immunization of children               | 96                  | 95                   | 96                  |

Source: Commune survey, 2004

#### 2.4. Availability of a working budget

*a. Communes are becoming increasingly responsible for part of the budget of the health center. This creates tensions and more uncertainty.*

The 1992 constitution laid the groundwork for decentralization and local management of service delivery by putting in place a network of communes, regions and districts. Recently, increased budget allocation to the communes for the social sectors has been given and some part of the health budget is now given to the commune instead of the centers directly. This creates tensions in the majority of the health centers that we visited in the survey, often due to the lack of transparency and trust between the personnel of the commune and personnel of the health centers.

Health centers have especially difficulties in planning their activities as most of the health centers have no idea on what type of resources they will have available during the year (Table 12). This is the case for all the sources of their budget. However, this is relatively more for material/budget from NGOs, donors and the communes than from the Ministry.

Table 12: Awareness of allocation of material/money by different donors at the beginning of the year (% of health centers)

|             | Ministry-<br>SSD | Commune | Donors-<br>NGO |
|-------------|------------------|---------|----------------|
| Rather good | 25               | 22      | 10             |
| Vaguely     | 42               | 31      | 17             |
| No idea     | 33               | 46      | 73             |
| Total       | 100              | 100     | 100            |

Source: Commune survey, 2004

A further question was asked if the commune was supposed to pay for salaries or houses of personnel of the health centers and this in 2003 and 2004. It was planned in about 36% of the communes that they were supposed to do so. While they effectively did do this in 32% of the cases in 2003, this declined slightly to 30% in 2004 (Table 13). It seems thus that

communes are less capable/willing to follow up on their promises.

Table 13: Contribution of the communes towards salaries or housing of personnel of health centers (% of health centers)

|                      | %  |
|----------------------|----|
| <i>2003</i>          |    |
| Planned              | 36 |
| Actually received it | 32 |
| <i>2004</i>          |    |
| Planned              | 36 |
| Actually received it | 30 |

Source: Commune survey, 2004

### 3. Changes on the demand side

After the supply changes, we now look at a few important factors that might have changed the demand for health services. They include the health card system, the prices paid by patients and the evolution in incomes of the population.

#### 3.1. The health card system

*a. A health card policy was designed as to aim to give the poor free access to health care. While almost 60% of the communes report that this policy is implemented, the real number of communes with a functioning health card system is significantly lower.*

The cost recovery policy in health care (Fanome) has been re-instated since October 2003. This has been applied by most public health centers. In an effort to help the poor, the government designed a policy whereby health centers were to put in place a special fund to pay for the costs of the poor people ('la Fanome avec le dispositif pour les indigents'). The poor people had to be identified by the commune based on a list of 8 criteria and the health centers were to use 3% of their revenues to pay for these costs.

About 64% of the public health centers and 57% of the communes declare that they have put in place this health card system (Table 14). However, there is quite some provincial variation. Three quarters of the centers in the provinces of Mahajanga and Toliara put this system in place. This is in sharp contrast with the province of Antsiranana, where only 37% of the centers did so.

Table 14: Percentage of public health centers where health card systems is reported to be functional

|              | % of centers |
|--------------|--------------|
| Antananarivo | 59           |
| Fianarantsoa | 54           |
| Toamasina    | 75           |
| Mahajanga    | 79           |
| Toliara      | 75           |
| Antsiranana  | 37           |
| <b>Total</b> | <b>64</b>    |

Source: Commune survey, 2004

*b. Centers that did not implement the health card policy did so because of lack of money and the lack of a list of poor people.*

For the centers that did not put in place the health card system, they were asked to indicate why not (Table 15). 33% report that they did not have the money to do so. The policy indicates that a fund of 500,000 Fmg should be gathered to start up the system. Some health centers are still trying to save for this amount as 3% of their revenues that should be allocated to this policy does not represent a significant amount of money for a number of communes. For example, some CSB2 in the province of Fianarantsoa indicated that the center had about 30,000 Fmg of monthly benefits.

38% of the centers indicated that they did not put in place the system for 'other' reasons. The most cited in this case was that the health centers never obtained a list of the people that were allowed to receive health care for free by the communes. The communes were often unable to make such a list as people did not want to have the stigma attached to them to be poor.

Table 15: Reasons why the health center did not put in place the health card system

|   | % of centers |
|---|--------------|
| Never heard about it                                  | 12           |
| Too recent policy and had not yet time to organize it | 17           |
| Lack of funds to pay for the poor                     | 22           |
| Lack of funds to put this system in place             | 11           |
| Other   | 38           |
| <b>Total</b>  | <b>100</b>   |

Source: Commune survey, 2004

*c. In the centers that report to have put the policy in place, the budget that is used towards this policy is still very small. There is also still a significant number of communes that have not yet identified the poor.*

Those centers that did put the policy in place were asked some more details about it. They were asked to give the number of poor that were identified by the commune as well as to report the amount of money they had allocated to it in the most recent period.

40% of the centers indicate they have not yet identified the poor (Table 16). For 13% of the centers, the number of poor varies between 1 and 15 persons and for another 13% of the centers between 16 and 30 persons. If we discard the centers that do not have identified the poor, it can roughly be estimated that only 43% of the centers have some kind of health card system in place.

The money that is allocated to the health card system is in general still very limited. Of those

centers that say they have the system in place, 33% of them spent no money on it and this for a variety of reasons. 19% spent an amount that was lower than 1000 Ariary per week. 20% spent more than 7000 Ariary per week.

Table 16: Number of poor and allocations towards them through the health card system - for those health centers that state to have a functional health card system - as stated by health centers

|   | % of centers |
|---|--------------|
| <i>Number of poor identified in the commune</i>                       |              |
| 0   | 40           |
| 1-15  | 13           |
| 16-30   | 13           |
| 31-100  | 15           |
| >100  | 19           |
| <b>Total</b>  | <b>100</b>   |
| <i>Allocations used in the health card system per week per center</i> |              |
| 0 Ariary  | 33           |
| >0 Ariary – 1000 Ariary   | 19           |
| >1000 Ariary – 3000 Ariary  | 18           |
| >3000 Ariary – 7000 Ariary  | 7            |
| >7000 Ariary  | 20           |
| <b>Total</b>  | <b>100</b>   |

Source: Commune survey, 2004

*d. About 32% of the rural communes have actually a system in place where some poor are identified and have access to free health care.*

As for the personnel of the health centers, the focus groups in the rural communes were also asked for their opinion on the health card system. 57% of the communes state to have a health card system in place (Table 17 and Map 4). For those communes that did not have this system in place, it was asked why. The main reasons were that people did not want to be identified as poor, that nobody in the commune fulfilled the criteria of being poor, and because of problems with the health center (lack of personnel or lack of a budget to pay for the poor).

For those communes that had the health card system in place, some further questions were asked on the functioning. Around 60% of these communes are satisfied with the system, think that it is used by the poor and that it is well targeted to the poor (Table 17). When asked about the percentage of people that use the health card system effectively in the commune, 21% of these communes said 'none'. These communes can then be considered of not having a functioning health card system in place. Accounting for this number, it is estimated that about 32% of the communes actually have a system in place where some poor are identified and have access to free health care.

Table 17: Opinions of the focus groups on the health card system

| % of focus groups that  | % of rural comm.. | Nb. of comm.. |
|---|-------------------|---------------|
| agree that health card system exists in their commune                               | 57                | 165           |
| state that health card system does not exist in their commune                       | 43                | 126           |
| <b>Total</b>  | <b>100</b>        | <b>291</b>    |
| <i>For those communes that state to have a health card system</i>                   |                   |               |
| are satisfied with the system   | 63                | 103           |
| agree that 'the system is used by the poor of the commune'                          | 62                | 102           |
| agree that 'the system is well targeted to the poor'                                | 60                | 98            |
| <i>Nb. of poor in the commune that use the health card system (% of population)</i> |                   |               |
| 0%  | 21%               | 33            |
| >0%-1%  | 35%               | 56            |
| >1%-5%  | 14%               | 22            |
| >5%-10%   | 6%                | 10            |
| >10%  | 25%               | 40            |

Source: Commune survey, 2004

### 3.2. Pricing of drugs

*a. The number of CSB2 that distribute drugs for free has declined compared to one year earlier.*

The cost recovery practice has become more widespread over the last year (Table 18). While 72% of the CSB2 charged prices for all drugs at the end of 2003, this increased to 86% at the end of 2004. The more generalized application of the charges for drugs might therefore also have been a cause for the decrease in the visit of health centers.

Table 18: Pricing practices in CSB2

| "Number of drugs the patients have to pay for" | Nov- Dec 2003 | May- June 2004 | Nov- Dec 2004 |
|--|---------------|----------------|---------------|
| All of them                                    | 72            | 84             | 86            |
| Some   | 20            | 15             | 13            |
| None   | 8             | 1              | 1             |
| <b>Total</b>                                   | <b>100</b>    | <b>100</b>     | <b>100</b>    |

Source: Commune survey, 2004

*b. Prices for drugs did not change compared to two years earlier.*

Table 19 shows the prices that are charged for drugs. There is little change compared to 2 years ago. If there was a change, it was that the drugs became even cheaper. This is seemingly a surprising result as most drugs are imported and there was a major depreciation of the exchange rate in 2004. However, given the problems with inflation in the year 2004, the government and the donors have tried to mitigate this in the case of drug prices, notably through direct subsidies to SALAMA, the central purchasing pharmacy (World Bank, 2005). This intervention has kept drug prices at the same level.

Table 19: Evolution of prices for drugs

|   | Nov- Dec 2002* | Nov- Dec 2003 | Nov- Dec 2004 |
|---|----------------|---------------|---------------|
| <i>Median prices, if prices charged (Ariary/Unit)</i> |                |               |               |
| Oral contraceptives                                   | 100            | 100           | 100           |
| Condoms   | 10             | 10            | 10            |
| Aspirine  | 7              | 7             | 7             |
| Paracetamol   | 8              | 8             | 8             |
| Solution de rehydratation orale                       | 149            | 149           | 149           |
| Antibiotique amoxyciline                              | 90             | 87            | 87            |
| Antibiotique cotrimoxazole                            | 19             | 19            | 19            |
| Antibiotique penicilline                              | 300            | 297           | 297           |
| Antibiotique doxycycline                              | 26             | 26            | 26            |
| Antibiotique tetracycline                             | 21             | 22            | 22            |
| Antipaludiques  | 20             | 16            | 16            |
| Seringues   | 110            | 90            | 90            |

\*: based on the 186 health centers surveyed in 2002 (Ilo program, 2003)

Source: Commune survey, 2004

However, the actual prices that are paid by the patients are in reality sometimes higher as a number of patients rely on drugs that are sold in the 'épiceries' and this mainly because of convenience (easy access, longer opening hours, etc.) but also because of the possibility of buying on credit.

### 3.3. Overall income and purchasing power of the population in rural areas

*a. The majority of communes say that welfare indicators and purchasing power are now worse than one year and three years ago.*

The Malagasy economy had a turbulent year in 2004 due to climatic setbacks (the cyclones Gafilo and Elita) and the consequent bad harvests, international conditions (increases in oil as well as rice prices) and an exchange rate depreciation. We tried to get a sense of the extent of these changes on the welfare of the people through the use of qualitative questions.

A question was asked on how the focus group felt the purchasing power of the people in the commune evolved. They had to rank the evolution from 1 to 5, corresponding to a ranking of 'a lot higher' to 'a lot lower' (Chapter 1: Table 3). The results indicate the deteriorating situation in rural areas in Madagascar. 5% of the communes state that their purchasing power improved compared to last year. 14% estimate that it is about equal. Almost 81% thinks that it has gotten worse. The results are even worse when compared to the same period in 2001. It seems that the subsequent shocks in the last three years have taken a heavy toll on the welfare of the people in rural areas. This clearly might have influenced the demand for health care.

*b. Less people can afford the health care costs.*

In the commune survey where the health center was located, a subjective question, with a focus group representative of the population of the commune, was asked on the percentage of the population that was completely unable to pay for health and schooling costs and the percentage that had problems to pay for these costs. Despite the abolishment of the user fees in education, the focus groups perceive that the former category increased from 15% to 19% from the period 2001 to 2004 (Table 20). This illustrates the effect of the different shocks on welfare of the rural households. It also illustrates to what extent the health card system would need to be expanded to cover the perceived needs as 20% of an average rural commune amounts to about 1000 people.

Table 20: Evolution of the percentage of the rural population that can afford health care services and schooling (estimate by communal focus group)

| % of the population that                                       | Nov-     | Nov-     | Nov-     |
|--|----------|----------|----------|
|  | Dec 2001 | Dec 2003 | Dec 2004 |
| can easily pay for health care and schooling costs             | 26       | 23       | 20       |
| has some problems to pay for health care and schooling costs   | 47       | 51       | 54       |
| are not able at all to pay for health care and schooling costs | 15       | 16       | 19       |

Source: Commune survey, 2004

#### 4. Perceptions of the community on health care

The analysis of the previous section relied mostly on responses of the personnel of the health centers. As there might be bias in their statements for a number of reasons, further questions on health care were also asked to the focus groups that represented the community as a whole. However, this was only done for the rural communes. The results are presented below.

*a. Communal focus groups estimate that the health status of the inhabitants stayed the same or improved compared to one or three years earlier.*

The results show that a significant number of focus groups believe that the health status of the inhabitants of the commune got better compared to the same period last year (Table 21 and Map 5). 47% of the communes think it stayed the same while 12% think that it got worse. When the current situation is compared to three years ago, 63% of the focus groups believe that it got better. The same perceived positive results show up on child mortality, if not better. These results are difficult to

explain, especially given the significant drop in visits to health centers.<sup>4</sup>

Table 21: Perceived evolution of the health status of inhabitants of the commune (perception by communal focus groups)

|  | % of the communes that state that the situation in 2004 |                |             |                    |                    |
|--|---|----------------|-------------|--------------------|--------------------|
|  | improved a lot  | improved a bit | is the same | deteriorated A bit | deteriorated a lot |
| <i>Change in the health status of the population in 2004</i> |   |                |             |                    |                    |
| Compared to 2003   | 0   | 41             | 47          | 11                 | 1                  |
| Compared to 2001   | 17  | 46             | 23          | 11                 | 3                  |
| <i>Change in mortality of new-borns in 2004</i>              |   |                |             |                    |                    |
| Compared to 2003   | 9   | 46             | 40          | 4                  | 1                  |
| Compared to 2001   | 32  | 31             | 31          | 5                  | 2                  |

Source: Commune survey, 2004

If there was a change, the focus group was asked why (Table 22). The major stated reasons are a change in the quality of the services as well as a change in health care expenses. A change in personnel availability was not considered important.

Table 22: Stated reasons for the change in health care status of the population compared to three years earlier (in %; 100% = all communes)

| Reasons                           | %   |
|-----------------------------------|-----|
| Change in availability of centers | 14  |
| Change in the quality of services | 38  |
| Change in health care expenses    | 23  |
| Change in personnel               | 3   |
| Non applicable (no change)        | 13  |
| Other                             | 9   |
| Total                             | 100 |

Source: Commune survey, 2004

*b. The main problems of the health center, as perceived by the focus groups, are the lack or absence of qualified personnel and the remoteness of the center.*

Most of the communes (91%) state that there are still people that do not visit the health center. However, they also state that the public health center is used by most of the inhabitants of the commune (Table 23). It is thus clear that they continue to have an important role to play for the health care of the rural population.

Table 23: Proportion of the rural population that uses the public health center

|        | % of focus groups |
|--------|-------------------|
| Nobody | 2                 |
| A few  | 12                |
| Half   | 14                |
| A lot  | 39                |
| All    | 32                |
| Total  | 100               |

Source: Commune survey, 2004

<sup>4</sup> It might be that this focus group methodology is not appropriate for such an analysis. More objective measures on the health status such as those collected in the national household survey or the demographic survey should be used.



The main problems of the health center, as perceived by the focus groups, are the lack of or absent qualified personnel (33% of the focus groups). 30% believe that remoteness is the major problem (Table 24 and Map 6). The availability of drugs on the other hand is not considered to be a major issue (8%).

Table 24: The main problems of the health center in the commune as stated by the focus groups

|                                       | % of health centers |
|---------------------------------------|---------------------|
| Remoteness of the center              | 30                  |
| The medical costs are too high        | 11                  |
| The drugs are not available           | 8                   |
| Lack of or absent qualified personnel | 33                  |
| Waiting time is too long              | 5                   |
| Others                                | 13                  |
| Total                                 | 100                 |

Source: Commune survey, 2004

## 5. Conclusions

To evaluate the dynamics and the state of the health sector, a monitoring survey was implemented in 300 communes and in 324 health centers at the end of 2004. The results show that visits to formal health services decreased by about one third compared to one year ago. Especially the rural public centers seem to be hardest hit. However, the majority of focus groups in the communes state that the quality of the service delivery in public health centers as well as the health situation of the population improved compared to one year and three years earlier.

The decline in visits seems most importantly due to demand shifts, more specifically the worsening of the welfare in rural areas as a high percentage of people state they can not pay for the health fees anymore. The decline in the visits seems also partly due to a lack of personnel as this was strongly involved in the vaccination campaign. Other supply indicators improved considerably compared to previous years.

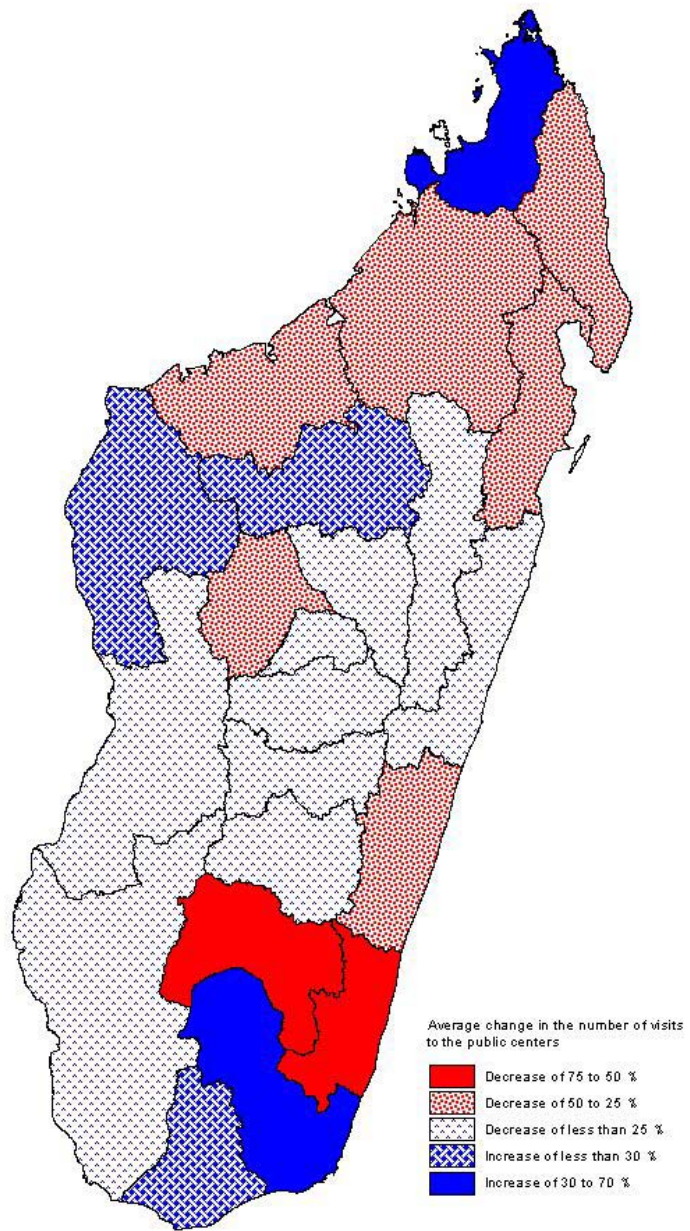
A health card system was implemented in an effort to improve access to health care for the poorest people. This seems to be working to some extent in between 32% to 42% of the communes. However, the money that is allocated to this health card system is still rather small. The reasons why the health card system does not work in the other communes seem to be related to lack of money of the health center as well as the problems of identifying the poor in the commune (due to stigma and the reportedly stringent criteria). Given the significant drop in visits, it is clear that the health card system was not able to make up for the policy changes in cost recovery and the increase in poverty.

Finally, while this type of survey allows us to have a quick overview of the state and of the dynamics of the health sector, there are however also clearly problems with this type of methodology. For the health center surveys, we relied mostly on the explanations of personnel who manage the center. This might introduce bias in some of the answers. As we follow centers over time and not households, it is difficult to make exact statements on the evolution of formal health care use. However, the results are for sure indicative. Luckily, a national household survey is currently fielded by INSTAT and a recent DHS survey was completed. These surveys should be a source of information that could provide more precise answers for some of these estimates.

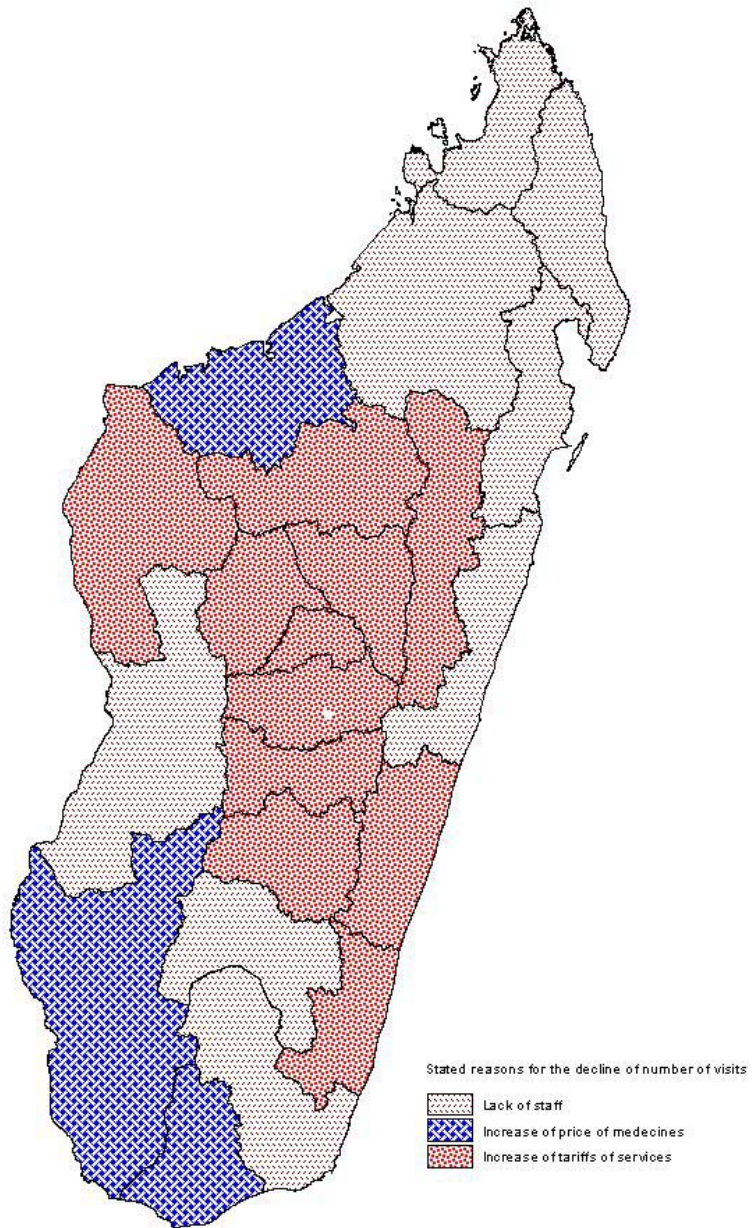
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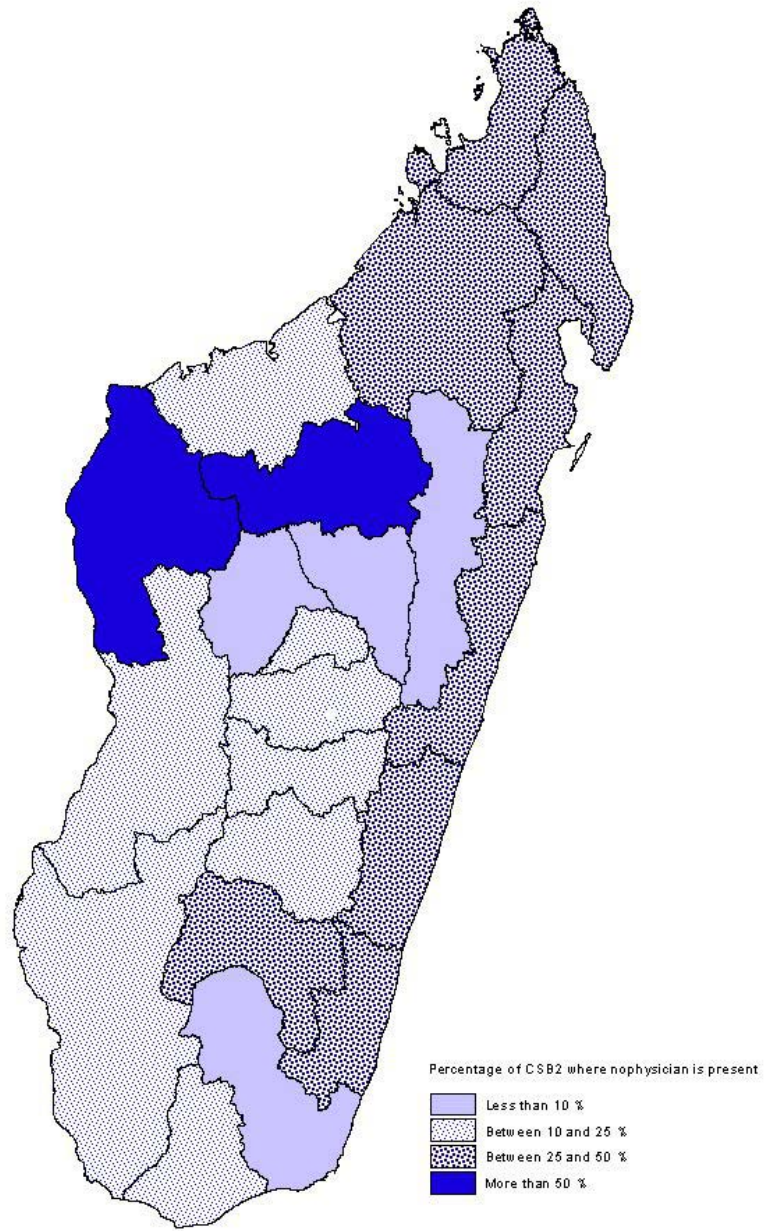
**Map 1 : AVERAGE CHANGE IN THE NUMBER OF VISITS TO THE PUBLIC CENTERS**



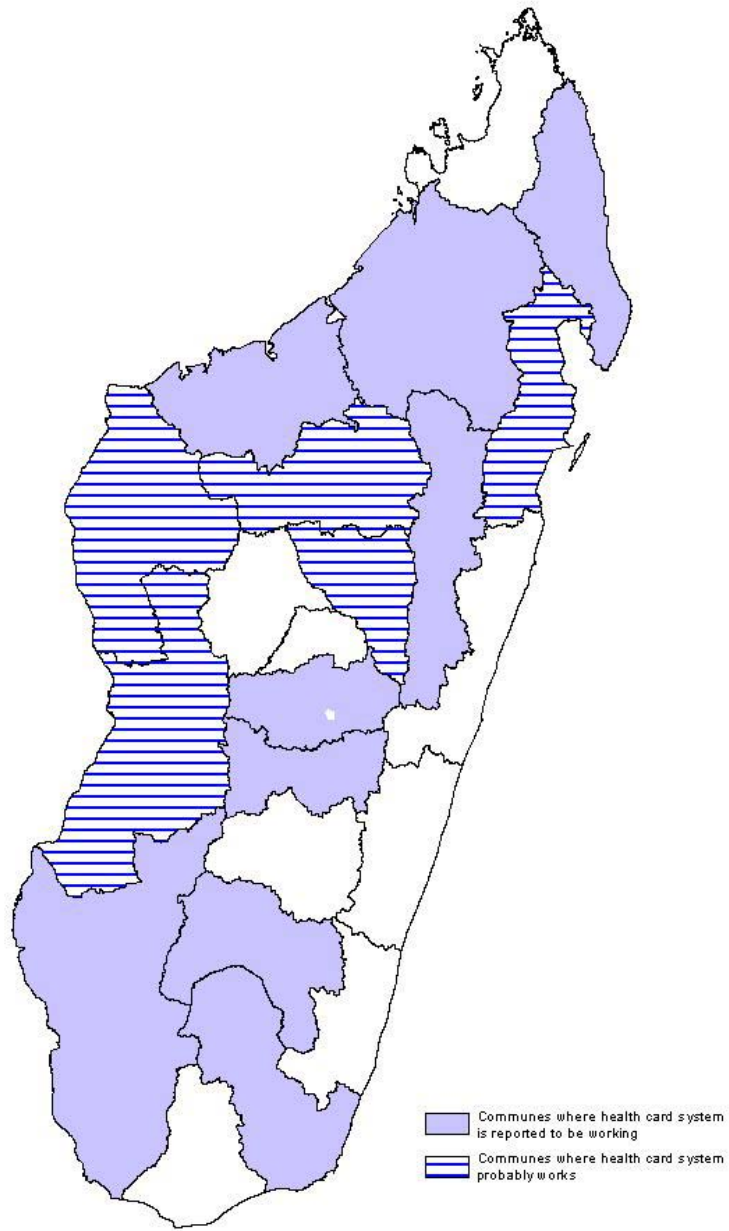
Map 2 : STATED REASONS FOR THE DECLINE OF VISITS



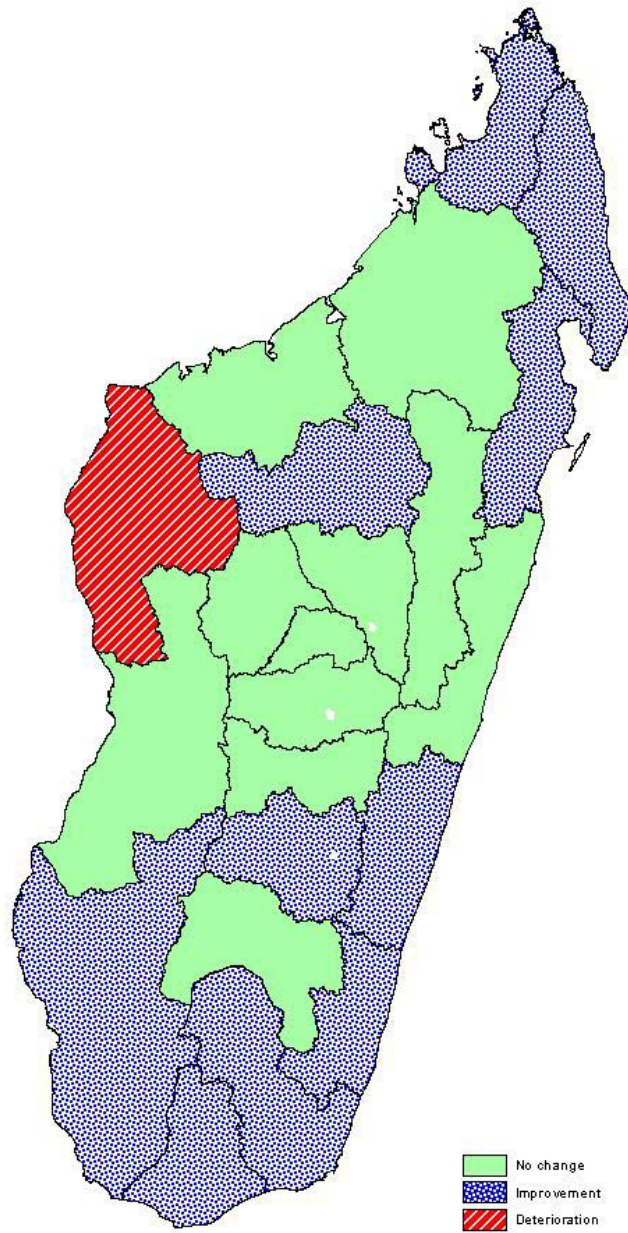
**Map 3 : PERCENTAGE OF CSB2 WHERE NO PHYSICIAN IS PRESENT**



Map 4: FUNCTIONNING OF THE HEALTH CARD SYSTEM



**Map 5 : PERCEIVED EVOLUTION OF HEALTH STATUS OF THE POPULATION**  
**- 2004 COMPARED TO 2003 -**



Map 6: MAJOR PROBLEMS OF HEALTH CENTERS

