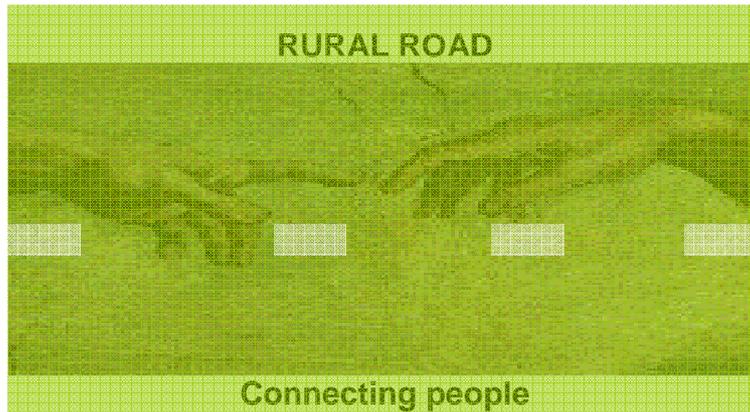


**BECAWS Model**  
**Program of Rural Roads**  
**« Roads and Road Traffic Department - DRRCR »**



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**BECAWS Model: NEW PUBLIC MANAGEMENT OF RURAL ROADS**

BY:

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## **A. Executive summary:**

Strategy is the way in which a company or an organization orients itself towards the market in which it operates and towards the other companies in the marketplace against which it competes. It is a plan an organization formulates to gain a sustainable advantage over the competition for companies and to satisfy its "citizen" customers in case of public service.

Special tools can be used to assist us in formulating strategies include critical analysis, SWOT analysis, Porter's model for industry analysis, macro-environmental context, resource-based model and McKinsey 7s's model. All these tools are specific and bring particular answers but they do not give the different steps to implement the new strategy or the changes of the organization.

The advantage of the BECAWS model is in its linkage between the input and the output. More than that, the BECAWS model extends the value chain in both direction, the income and the outcome, in order to consider all the aspects of the value chain and by the time improve it (c.f. figure below).

We detail in this paper, in the first part the BECAWS model compared to other models, in the second part, using the The Enterprise Research Phase (BEC) of the BECAWS model, the development and roll-out of the Second National Program of Rural Roads (NPRR-2) which constitutes the response of the Roads and Road Traffic Department (DRCR) to give road access to Rural population.

The analysis of the current situation and the environment of road infrastructure show the alertness to improve road accessibility for Rural population where poverty is spreading. For that purpose the DRCR has imagined a National road program to increase the rural population accessibility from 56% to 80% by 2012.

The objective is to improve countryside servicing landlocked areas by building 2000 km rural roads each year, which constitute a global need of 15000km of rural roads and 11 billion MAD.

## **B. Benchmark with classic methods and tools.**

Before analyzing strategy formulation and deployment methodology, we present here before different model:

### **B.1. Porter 5's Forces Analysis:**

The **Porter 5 forces analysis** is a framework for business management developed by Michael Porter in 1979. It uses concepts developed in Industrial Organization (IO) economics to derive **5 forces** that determine the attractiveness of a market. Porter referred to these forces as the microenvironment, to contrast it with the more general term macroenvironment. They consist of those forces close to a company that affect its ability to serve its customers and make a profit.



### **- Five Forces:**

Four forces -- bargaining power of customers, the bargaining power of suppliers, the threat of new entrants, and the threat of substitute products -- combine with other variables to influence a fifth force, the level of competition in an industry. Each of these forces has several determinants:

#### **The bargaining power of customers**

- Buyer concentration to firm concentration ratio, Bargaining leverage, Buyer volume ...

#### **The bargaining power of suppliers**

- Supplier switching costs relative to firm switching costs, Degree of differentiation of inputs, Presence of substitute inputs...

**The threat of new entrants**

- The existence of barriers to entry, Economies of product differences, Brand equity, Switching costs, Access to distribution...

**The threat of substitute products**

Buyer propensity to substitute, Relative price performance of substitutes, Buyer switching costs, Perceived level of product differentiation...

**The intensity of competitive rivalry**

- Number of competitors, Rate of industry growth, Intermittent industry overcapacity, Exit barriers, Diversity of competitor sense...

**B.2. SWOT Analysis:**

SWOT Analysis is a strategic planning tool used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture or in any other situation of an organization requiring a decision in pursuit of an objective.

**- SWOT Model as a Matrix:**

The dimensions of the SWOT model of analysis are displayed as a matrix as follows:

SWOT-analysis		Internal analysis	
		Strengths	Weaknesses
E x t e r n a l	Opportunities	<i>S-O-Strategies:</i> Develop new methods which are suitable to the company's strength.	<i>W-O-Strategies:</i> Eliminate weaknesses to enable new opportunities.
	Threats	<i>S-T-Strategies:</i> Use strength to defend threats.	<i>W-T-Strategies:</i> Develop strategies, to avoid that weaknesses could be targeted by threats.
A n a l y s e			

**Strategic Use: Orientating SWOTs to An Objective.** If SWOT analysis does not start with defining a desired end state or objective, it runs the risk of being useless. A SWOT analysis may be incorporated into the strategic planning model. If a clear objective has been identified, SWOT analysis can be used to help in the pursuit of that objective. In this case, SWOTs are:

**Strength:** attributes of the organization that are helpful to achieving the objective.

**Weaknesses:** attributes of the organization that are harmful to achieving the objective.

**Opportunities:** external conditions that are helpful to achieving the objective.

**Threats:** external conditions that are harmful to achieving the objective.

**-Internal and External Factors:**

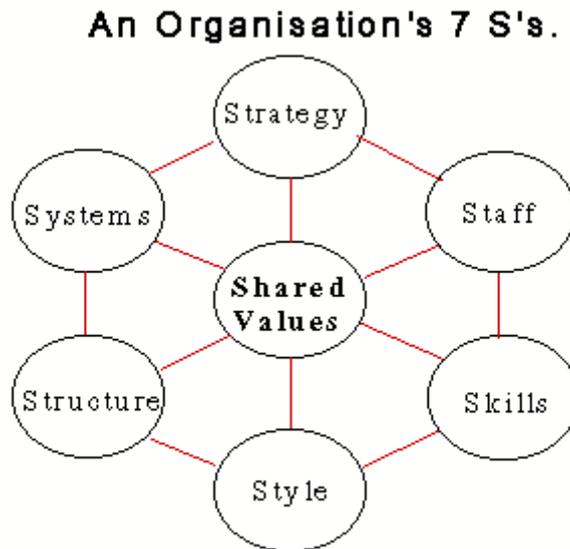
The aim of any SWOT analysis is to identify the key internal and external factors that are important to achieving the objective. SWOT analysis groups key pieces of information into two main categories:

**Internal factors** - The 'strengths' and 'weaknesses' internal to the organization.

**External factors** - The 'opportunities' and 'threats' presented by the external environment.

### B.3. McKinsey's 7s's Model:

McKinsey's 7 S's Model provides a useful framework for reviewing the impact of change:



- **Shared Values and Beliefs:** A role of the vision statement is to impart to the organisation (and externally) what the organisation stands for and what it believes in.
- **Strategy:** States how an organisation will attain its vision and respond to the threats and opportunities of the new mediums.
- **Systems**, including Processes: Capabilities are required in: IT & IS:
- **Staff:** HR management for developing the skills and aptitude for building lifetime customer relationships, providing quality service and making appropriate sales.
- **Style:** If staff is to treat customers as individuals, then they themselves will need to be managed as individuals. This suggests a self-management style.
- **Structure:** Organisations will find that changes to processes and style inevitably require changes to their structure. To be responsive and results oriented an organisation needs to move to a Network structure.
- **Skills:** If staff and managers are to acquire all the skills outlined above, then there needs to be an appropriate learning environment.

### B.4. BECAWS Model:

BECAWS six-step model is to:

1. **Be alert** – to discover the uniqueness of the situation;
2. **Explore** – the enterprise's issues;
3. **Create** – innovative action options to raise the bar for positive outcomes;
4. **Agree** – on a plan of action;
5. **Work together** – the plan, and then go about;
6. **Steering** – with the rowers, to monitor progress, be accountable for results, and evaluate the outcomes.

- Phase 1 – The Enterprise Research Phase [The BEC steps]

The enterprise research phase sets the stage for those involved to consider a prospective mutual enterprise. This phase includes the first three steps of the enterprise government management methodology

- Phase 2 – The Enterprise Action Phase [The AWS steps]

The second phase of enterprise government management provides the remaining three key steps through which the enterprise's positive outcomes can result. They are listed below:

### B.5. Analysis and criticism:

If SWOT analysis does not start with defining a desired end state or objective, it runs the risk of being useless. A SWOT analysis may be incorporated into the strategic planning model. If a clear objective has been identified, SWOT analysis can be used to help in the pursuit of that objective. In

this case, SWOTs are used so that, for example, weak opportunities may appear to balance strong threats.

Porter's model and Mc Kinsey model are more focused on the direct competitor and the industry of the competitors, the direct business environment. It does not directly take into account the other influencing factors from the "outside" (social, technological, environmental, economic, and political).

The "reality" is the challenge which has to be faced in the event of introducing an institutionalised competitive process, like BECAWS model. BECAWS is for our vision a more "how to" style. BECAWS supports the strategy building process and is a real life implementation approach. Porter's vision by itself is one half, one part of a process. It implies the necessity of living that vision. So, we think that there is a parallel development of the disciplines of corporate strategy and industrial organisation. We suggest that the two may be about to merge, or at least be capable of synergy.

BECAWS focuses on the transition between the steps of change. Its values are both in that it can be useful as a supportive adjunct to many change management methods and the fact that it operates at the nodes between the steps of change. It's like a guide to develop organization.

This model is like a formula for successful change, it's also a template to help people ensure some level of common sense to the project as they go through the process of creating changing their organizations and to achieve strategic objectives

## **C. What are the pros and cons of BECAWS model?**

### **C.1. Strategy definition**

Strategy is the way in which a company or an organization orients itself towards the market in which it operates and towards the other companies in the marketplace against which it competes. It is a plan an organization formulates to gain a sustainable advantage over the competition for companies and to satisfy its customers" citizens" in case of public service.

... the determination and scope of an organization over the long-term, which achieves advantages for the organization through its configuration of resources within a changing environment to the needs of markets and fulfil stakeholders expectations.

*Gerry Johnson and Kevan Scholes*

... the deliberate search for a plan of action that will develop a business's competitive advantage and compound it.

*Bruce Henderson*

Based on the above definitions we would like to stress the following aspects that are crucial for strategy formulation:

- Strategy is concerned with the long-term direction of the organization
- Strategy deals with the overall plan for deploying the resources that an organization possesses
- Strategy is the process of determining appropriate courses of action for achieving organizational objectives and thereby accomplishing organizational purpose.

### **C.2. Requirements and Tools:**

The strategy to be implemented should reflect environmental analysis, lead to fulfilment of the organizational mission, and result in reaching organizational objectives.

As listed above, special tools can be used to assist us in formulating strategies include critical analysis, SWOT analysis, Porter's model for industry analysis, macro-environmental context and resource-based model. These five strategies development tools are related but distinct. We should use the tool or combination of tools that is most appropriate for our organization and business environment.

All these tools are specific and bring particular answers. Each one concerns the criticism of the internal process or the evaluation of the external environment or in the case of McKinsey 7s's model; it evaluates the impact of changes made to the former organization.

But they do not give the different steps to implement the new strategy or the changes of the organization.

### **C.3. BECAWS model pros and cons:**

The advantage of the BECAWS model is in its linkage between the input and the output. More than that, the BECAWS model extends the value chain in both direction, the income and the outcome, in order to consider all the aspect of the value chain and by the time improve it.

The use of other business analysis models helps to identify and analyse different aspect of the business: environment, customers, competitors, threats, opportunities... but the BECAWS model had an advantage of exploring new options and was open to every possibility.

The model is not stuck with an analysis of a pre-defined objectives, it permits to explore and create. First, the decision makers have to determine whether the objective is attainable

The main advantage of the BECAWS model is that it draws attention to strategic issues or offers an infinite exploration issues.

The BECAWS first phases, BEC step: The enterprise research phase requires different tools to make an environmental analysis to identify the needs.

In addition this first step of the model links between the research phase and the action option phase that makes the exploration of different issues sticks with the planed actions. Taking into consideration the entire environment, internal and external; push the action option to be more adapted to the integral process of the organization.

The second step of the BECAWS model: AWS action phase, implement the changes, according to the analysis of the first phase of the model.

The linkage between the outcome and the income of the organization permits to synchronise between the two parts of the value chain or network.

In addition the actions made from the observation and the exploration, are taken in harmonic way after an agreement on the action plan. The action planners, together with the organization decision-makers, integrate the action options into the tracks as a strategy for change and correct a former situation and to improve it.

Finally the model enables a monitoring of the implemented on the output to evaluate the return of the new strategy and come up with corrective actions.

In the other hand, the model does not give the analysis method and the different exploration options; it just gives the highlight strategic steps of the evaluation and the implementation. The lack of these steps could be filled by using other models as Mckinsey, Porter, or SWOT analysis.

It is also perhaps not feasible to evaluate the attractiveness of an industry independent of the resources a firm brings to that industry. It is thus argued that this theory be coupled with the Resource-Based View in order for the firm to develop a much more sound strategy.

## **D. BECAWS case: Rural Roads**

### **D.1. Summary**

We detail in this part of the paper, using the The Enterprise Research Phase (BEC) of the BECAWS model, the development and roll-out of the Second National Program of Rural Roads (NPRR-2) which constitute the response of the Roads and Road Traffic Department (DRCR) to give road access to Rural population.

The analysis of the current situation and the environment of road infrastructure show the alertness to improve road accessibility for rural population where poverty is spreading. For that purpose the DRCR have imagine a national road program to increase the rural population accessibility from 56% to 80% by 2012.

The objective is to improve countryside servicing landlocked areas. We aim at building 2000 km rural roads each year which constitute a global need of 15000km of rural road and 11 billion MAD.

### **D.2. Phase 1 –The Enterprise Research Phase**

#### **D.2.1. Step 1 –Be alert to discover the uniqueness of the situation:**

##### ***A. Enterprise's current situation and organization***

###### **a) Organization and human resources:**

Roads and Road Traffic Department (DRCR), coming under the Ministry of Equipment and Transport is a public organization created to construct, operate and maintain road infrastructures in Morocco.

DRCR has 45 territorial representative agencies with 29 Provincial Offices (DPEs) and 16 Regional Offices (DREs), and employs 7000 persons.

###### **b) Managed road network:**

DRCR manages a perpetually changing and developing road network. This network comes to 57.226 Km, 32.086 Km of which are surfaced roads (i.e. 56%) and 25.140 non-surfaced roads. In

addition, 600 Km of highways are put into service and are contracted out to the Highways of Morocco National Company (ADM), the managed network represents an asset of 30.000 million DH.

**c) Financial resources**

DRCR resources are 3 200 million MAD / year from:

- Government budget: 600 million MAD
- Partnership : 650 million MAD mainly :
  - ✓ Government: 1500 Local collectivity, 16 regional council , 60 provincial council, other 100 government organizations
  - ✓ 1000 Non governmental organization
  - ✓ Private sector (50 key account: Lafarge, Holcim , ...)
- Special road fund (fuel tax): 2000 million DH

**d) Enterprise strategy:**

DRCR implements a road strategy centered on:

- Preserve the road heritage to improve the state of existing road infrastructures. The quantitative aim is to achieve annually 1000 Km reinforcement and 1000 Km surfacing and the qualitative aim is to keep the road network at least in its current state which is 65% at a good standard (Class A+B).
- Adapting the road network to traffic development to reduce vehicle traffic cost, improve the level of the service provided to the users, as well as for road safety by widening narrow roads, improving routes to ensure free flow, bypassing main urban areas, improving road safety, etc.
- Extending the road networks to improve Rural servicing in particular that of landlocked areas and accompany economic development project. The average construction rate of Rural roads is 1000 km/year

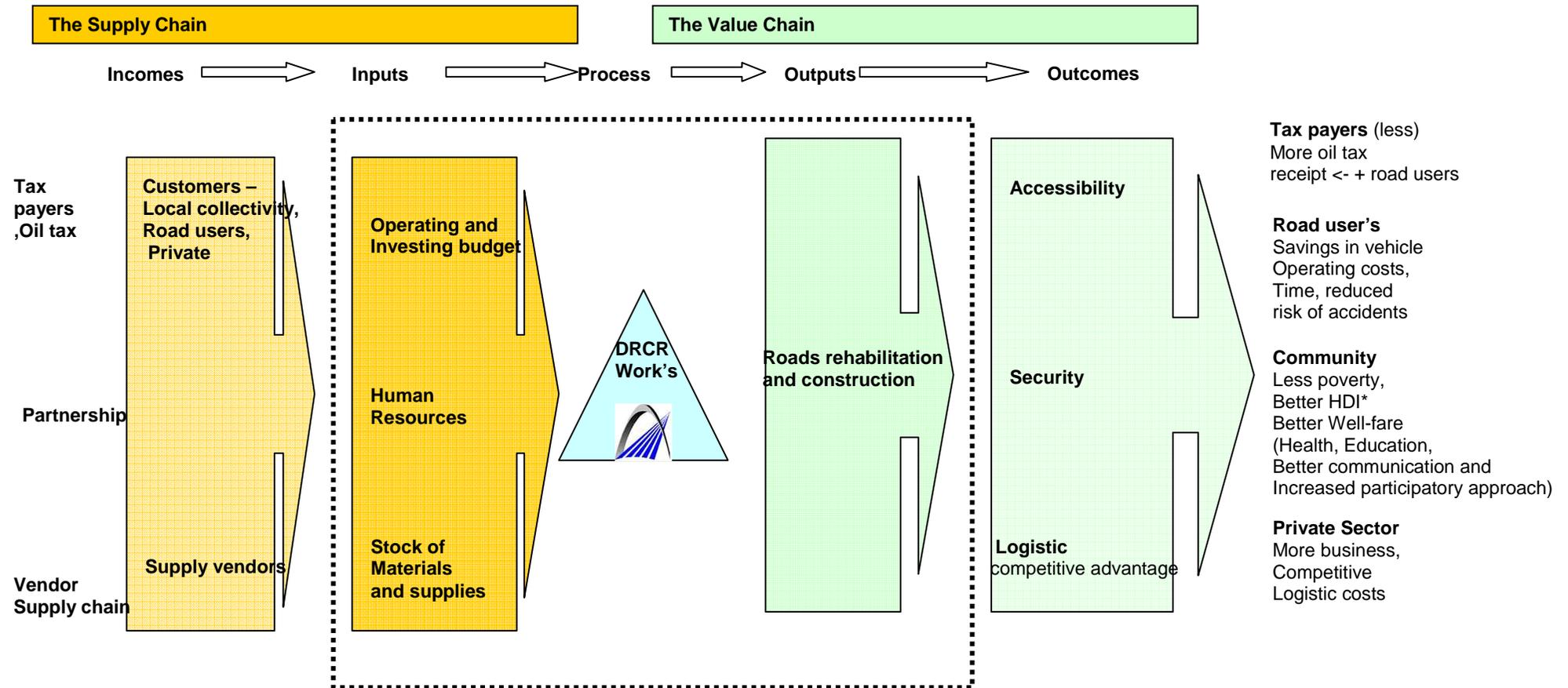
**e) Data on the Enterprise's Market (citizens /road users):**

- Rural represents 45% of a total population of 30 Million.
- Demographic evolution of some regions requires development of transport infrastructure
- Economic conditions improvement:
- GDP growth: 5%
- Road traffic growth: Annual rate of 5%
- Number of foreign tourists grows annually by 25%
- Domestic tourism improvement through Buying power increase
- Decentralization has generated new regional administrative and economic poles
- Big gap between the ten provinces with the lowest accessibility, and the ten provinces with the highest accessibility
- 6 million of rural population haven't access to the road network

**B. Alertness:**

**Huge number of rural population (6 million people) hasn't the service of accessibility to road infrastructure which reinforces its poverty.**

### C. Supply and value chain:



\*HDI: Human Development Index,

## **D.2.2. Step 2 –Explore the Enterprise’s issues : Key changes**

### ***A. Increased rural poverty:***

To reach the Millennium Development Goals in Morocco, the development of rural areas will be critical. Poverty is mainly rural, since nearly one in four Moroccans living in non-urban areas is poor compared to one out of ten in urban areas. Overall, 66 percent of the poor live in rural areas, About 19 percent of Morocco’s population, equivalent to 5.3 million people, are estimated to be below the poverty line, and 44 percent, equivalent to 12 million people, are considered economically vulnerable (at or below 50 percent over the poverty line). The rural-urban gap is especially big for the extreme and very poor: three million rural people fall in this category, compared to 0.7 million for the urban population. Rural poor tend to live in large households, have few working members and an illiteracy rate of 67 percent, compared to 34 percent in urban areas, and live disproportionately in **isolated areas**.

### ***B. New Government strategy***

One of the Government’s priorities noted in its 2020 Rural Development Strategy is to improve conditions of the rural population by **increasing their access to basic infrastructure and social services**. This strategy includes reducing the imbalance between the provinces better off in terms of accessibility, and those worse-off. In the mid-1990s, the Government launched rural infrastructure programs targeted at the rural population in power, water and roads, and these programs are ongoing.

### ***C. Inadequate Rural roads accessibility:***

Most of the classified roads serving rural populations are unpaved, and the large majority is tracks with minimal or no technical standards. The very low standards of these roads cause frequent road closures or impassability by most motorized vehicles due to weather conditions and traffic-induced deterioration. The result is that only about 54 percent of the rural populations have access to roads that can be used reliably at all times.

Also, there is a big gap between the ten provinces with the lowest accessibility, and the ten provinces with the highest accessibility; in fact, there are large differentials among provinces in terms of the rural population’s access to roads, which ranges from about 79 percent for the better served provinces to around 23 percent for the more isolated ones

### ***D. Inadequate Quality of the road network:***

Just over one-half (56.5 percent) of Morocco’s classified road network is paved (totaling 32,700 kilometers), including 620 kilometers of motorways and some 18,000 kilometers of two-lane roads that meet international standards. These roads carry the heaviest inter-city traffic. Close to half of the classified paved network consists of narrow roads, less than 4.5 meters wide, or about the width of a conventional single-lane. Since the late 1990’s, traffic has grown at a sustained pace of three to seven percent per year, and use of larger trucks for long-distance hauling is also growing. As a result, the road network is becoming increasingly inadequate, causing high costs of land transport and increasing traffic accidents and fatalities.

### ***E. Large Size of the road network under the central government:***

Morocco’s classified road network that is under the jurisdiction the Ministry of Public Works and Transport (MPWT) is large relative to the networks managed by other government levels. The Directorate of Roads and Road Traffic (DRCR) manage national, regional and provincial roads. Ideally, part of the provincial and regional roads should be transferred to the respective local governments (regions, provinces and *communes*). However, attempts in the early 1990s to make such transfers failed because: (i) of the weak financial and technical resources of local governments and slow progress with the Government’s decentralization process that could have improved the shortfall in resources; and (ii) important investments needed to rehabilitate the roads largely exceeded the resources available locally.

### ***F. Centralized road management and lack of capacity at the local level:***

The DRCR, together with MPWT’s 29 Provincial Offices (DPEs) and 16 Regional Offices (DREs), manages the classified road network. The number of DREs has gradually increased from four pilot offices in the mid-1990s to 16 offices today. The DRCR has already delegated several technical review functions to the regional and provincial offices. In practice, however, the deconcentration is limited, and the central level still retains many functions that could be passed on to the DREs and DPEs, such as programming the maintenance of provincial roads, since resident engineers are more knowledgeable of road condition and needs.

### ***G. Lack of funding for road maintenance and extension:***

The funding of roads extension and maintenance is insufficient , and currently generated from three sources:

- ➔ The general budget (600 million MAD/Year).
- ➔ Partnership with local collectivities, non-governmental organization and private sector (600 million MAD / Year)
- ➔ The Road Fund (*Fonds Spécial Routier, FSR*) The FSR, a Treasury Special Account created in the early 1990s, is funded by a number of road user charges, notably fuel taxes, a vehicle registration fee, and an axle-load tax for

freight vehicles. Initially, the FSR was established to finance maintenance of the classified road network only. However, in order to secure the financing necessary for improving rural accessibility in 1995, the Government increased FSR's revenues by raising fuel (gasoline and diesel) taxes. Consequently, in 2004, funding provided to the FSR amounted to MAD 2 billion, of which 1.3 billion came from fuel taxes.

A recurrent issue with Morocco's road system is the allocation of funding for road maintenance. In the last decade, funding improved with the creation of the FSR. Even then, funding for maintenance was not always sufficient.

#### *H. Lack of global view of rural roads*

In the provinces, a diversity of sponsors and agencies are involved in financing and executing rural roads projects. This makes it difficult to obtain a global view of all projects, which is essential to facilitate integration of rural road programs with other sectors and activities planned at the local level.

#### *I. Poor road safety*

With the increase in traffic and the low standards of the road network, traffic accidents, fatalities and injuries have grown at an alarming pace.

#### *J. Lack of transport services for rural population:*

Transport services in rural areas are provided by private operators. In the areas with thin demand for passenger services, due to low population densities, and where road conditions are generally poor, transport services are often limited to basic, once or twice daily bus service or all-wheel drive vehicles on the poorer roads. Where the roads are better, individual operators provide higher quality and more frequent service with smaller vehicles, often share-ride taxis. Regarding road freight, this industry was, until recently, highly regulated, which hampered competition and led to high freight tariffs and inadequate services.

#### *K. High Tourism growth:*

With the vision of Morocco 2010, Morocco attracts more and more tourists, in fact, number of foreign tourists grows annually by 25%, besides, due to the national economic improvement, Domestic tourism improvement through buying power increase. And one of the most interesting attractions of Morocco is the Rural which increases the demand of rural roads.

#### *L. Emergence of a democratic society:*

Enhancement of participatory approach in a democratic society creates more requirements.

### **D.2.3. Step 3 –Create Innovative Action options to raise the Bar for Positive Outcome**

The analysis of these key changes shows the urgency to deal with this ignored rural population, which pushed the DRCR to search for innovative actions to increase the accessibility of the rural population to the road network.

#### *A. Increase the rural accessibility:*

Studies of the impact of roads have revealed a strong inverse correlation relationship between rural poverty and the accessibility to the road network.

Part of the solution of rural poverty is to increase the rural population accessibility from 56% to 80% by 2012 through offering to the user's access to the Moroccan road network, in all weather time and at less than one kilometer from each locality of more than 50 households.

The physical objective is to build 2000 km rural roads each year, which constitute a global of 15000 km with 11 billion MAD of need of funding.

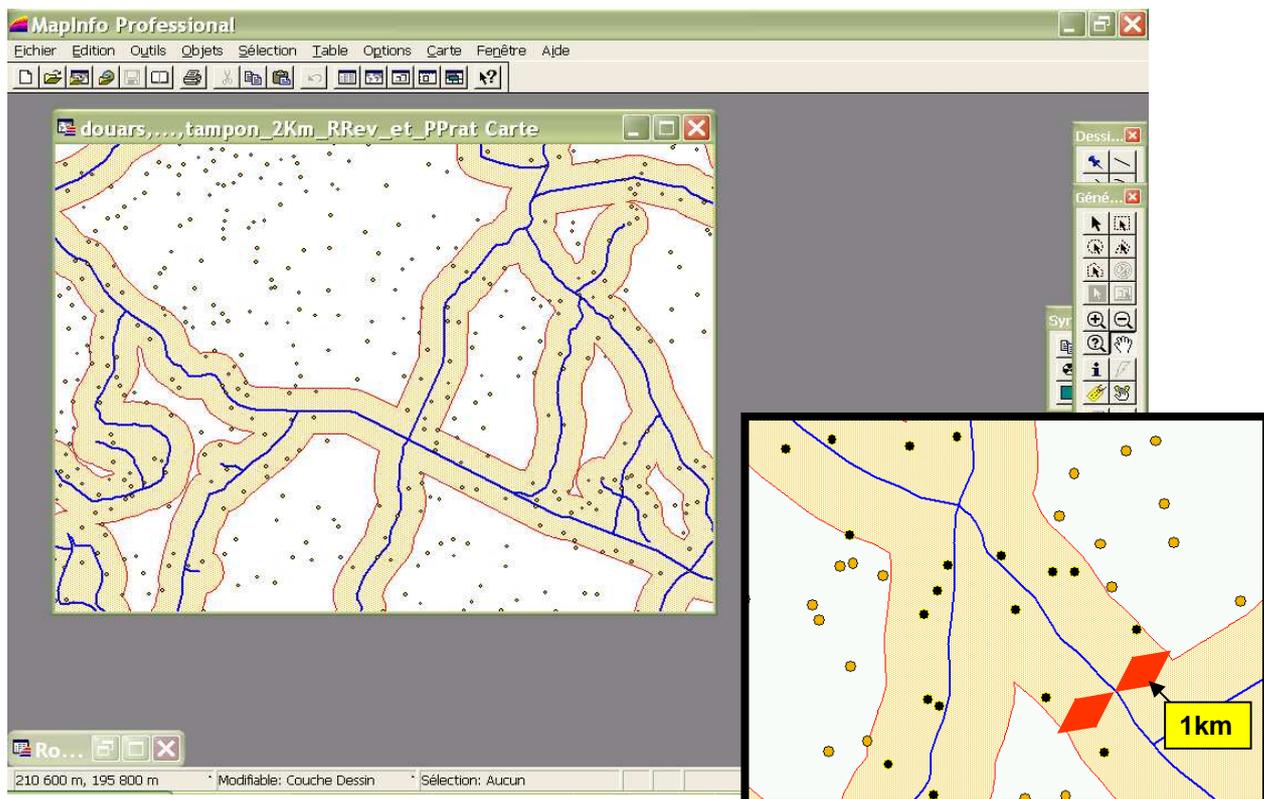
#### *B. Accessibility as a new indicator of prioritization, monitoring and evaluation.*

Population counted as having access to rural roads are those who live in villages (douars) of at least 50 households, and are located not more than one kilometer away from an all-weather road. This definition takes into account that:

- Providing rural access to highly dispersed populations is not presently affordable. (more than 50 households)
- A large proportion of the inaccessible rural population lives in mountainous areas, some at high elevations, which makes walking and access to basic services and economic opportunities difficult (less than 1 km).

This new indicator is the key stone for all the steps of the NPRR-2 program, it serves to:

- Prioritize between potential projects instead of the NPV or the IRR.
- Place the human being in the center of the project.
- To choose between variants of technical pathway
- To monitor the project
- To evaluate the outcome of the program
- To disseminate information to Citizens/Users/Partners



DRCR as an implementing technical department has long time away kept only performance indicators to assess the quantity and quality of the means deployed in order to achieve Program objectives and mainly the number of kilometers of roads launched under the program.

With this new indicator, besides the output performance indicators, the NPRR-2 management will focus on the outcome indicators to monitor the Program's impact upon the targeted population by measuring the increase in rural accessibility (the main indicator of the NPRR-2), the accessibility differential among provinces, and the degree of improvement of transport services:

OUTCOME	Outcome Indicators
<ul style="list-style-type: none"> <li>• Increase accessibility of rural population to all-weather roads</li> </ul>	National Rural Road Accessibility Index (NRRAI) increase from 54 percent in 2005 to 67 percent in 2010 (63 percent by the Mid-Term Review and 80 percent in 2012 when the NPRR-2 is completed)
<ul style="list-style-type: none"> <li>• Reduce access differentials between provinces</li> </ul>	Accessibility differential Indicator (ADI) improved from 0.43 in 2006 to 0.65 in 2012
<ul style="list-style-type: none"> <li>• Improve quality of service of inter-city transport for passengers</li> </ul>	By project completion, at least 80 percent of roads in the sample will show quality improvement two years after open to traffic.

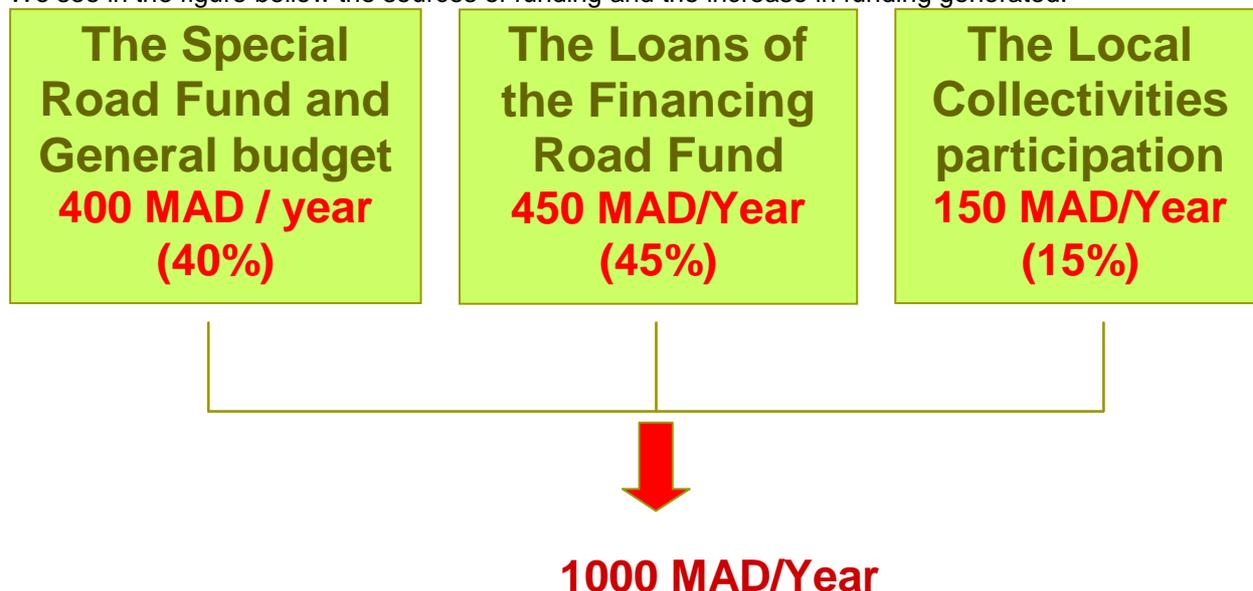
#### C. Increase the funding:

As funding is not sufficient to achieve the purpose of this program, we had to think to creative action to increase the funding:

- The *Caisse pour le Financement Routier* (CFR) was created as a public entity with administrative and financial autonomy to mobilize financing for rural road development through borrowing, with the FSR being used to repay loans. The CFR's borrowing capacity will significantly increase the funding by 450 million MAD/Year available for rural roads.
- In order to increase the funding, and reinforce the participatory approach, we had to build partnerships with the local collectivities, which will bring 100 million MAD each year the funding of the NPRR2 program.

- We still have an option of action by increasing the Road Fund resources should be augmented to ensure that required funding that result from the rural roads programs are sufficient.
- More efficient use of resources will permit a slight improvement in the overall rating condition of the road system: concentrate the effort on current maintenance and use the adapted technical standards to the rural environment.

We see in the figure below the sources of funding and the increase in funding generated:



#### *D. Centralized road management and lack of capacity at the local level:*

The DRCR should delegate more and more function to the regional level, and give more tools (GIS, HDM, RED) to help the DREs and DPEs managing the roads at the local level.

DRCR have to establish an assistance system to the local level human resources (both DRE/DPE and local collectivities) that will give them:

- Technical assistance
- External finance and accounting assistance and training

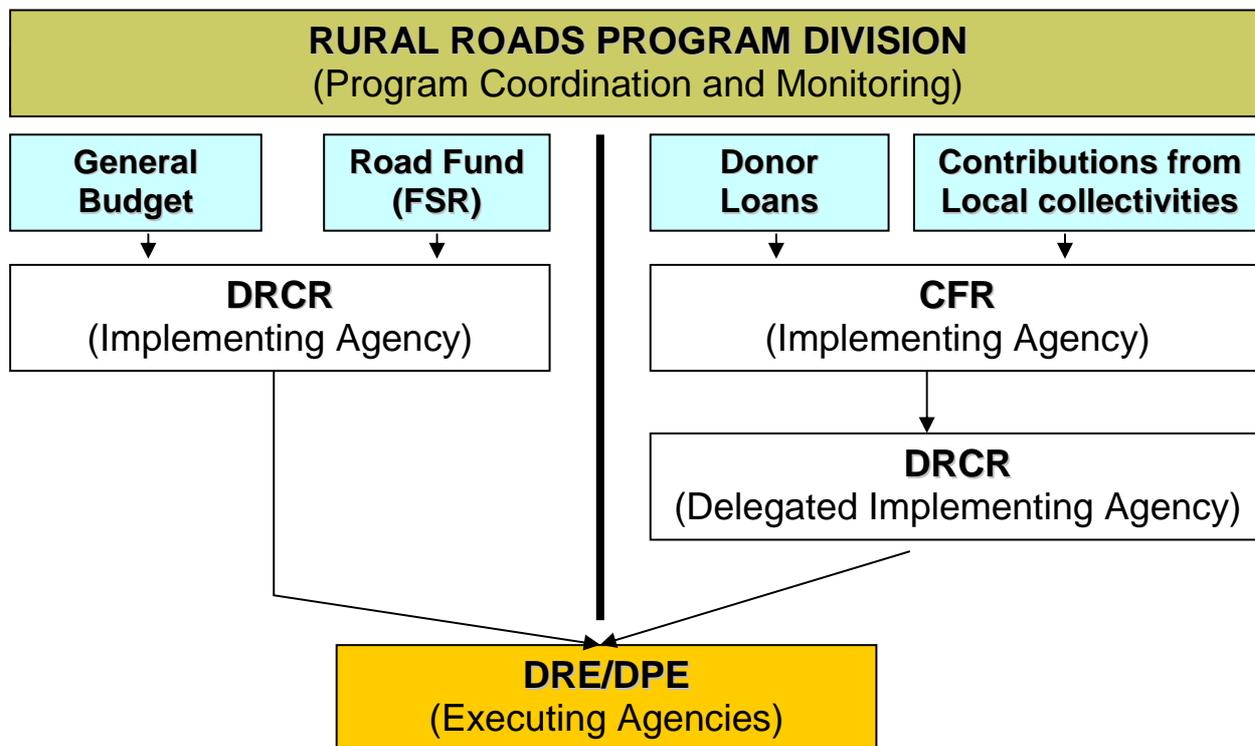
Furthermore, the DRCR can influence local collectivities in order to increase their capacity to manage local roads by:

- Launch a study to audit the local human and financial resources and to propose new kinds of organizations as other countries have deployed very successful best practices: new ways to raise funds the use of local tax, synergy between local collectivities by implementing regional centralized center for material and for technical assistance.
- Increase the number of partnerships with local collectivities in order to act as a delegated implementation agent.
- Clarifying the scope of intervention of the DRCR to classified roads, and that non-classified belong to the responsibility of local collectivities.

#### *E. Lack of global view of rural roads*

In order to obtain a global view of all projects:

- The DRCR, with the help of its Provincial Directorates (DPE), carried out an inventory of the country's rural roads with a view to facilitate preparation of their priority rural roads programs.
- The DPEs will be responsible to generate information on all rural roads projects, including their implementation status, and to disseminate such information to government officials and service providers in an effort to facilitate the planning of infrastructure, services and investments.
- Solidification of the circuit through establishment of common Program management procedures and training
- Creation of a Rural Roads Program Division (RRPD) devoted to consolidation of the Program.



- Development of new Information tool for NPRR-2 management : Geographic Information system (MapInfo), Internet web based application to disseminate the information, project planning tools (MS project 2003)

*F. Poor road safety: UIPS Urgent and Integrated Program of Safety*

An inter-ministerial commission for road safety, reporting directly to the Prime Minister, was created to promote road safety plans and oversee their implementation. The DRCR is part of this commission. DRCR can implement by including the funding of the actions below in the NPRR-2 program:

- Enhance the infrastructure by eliminating of the most dangerous road sections (black spots) in the rural roads.
- Reinforce signalization of the rural roads

*G. Lack of transport services for rural population: liberalize the transport sector*

DRCR have to encourage liberalizing the transport sector, that should significantly improve the provision of road transport services in villages and rural areas because small trucks, that are appropriate for the rural economy due to the small size of shipments and poor road condition, will no longer be constrained to own-account transport. Where roads are improved, better truck services with lower prices will be offered.