ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24AUG1446

Promoting Competitive Football through Geodetection: Performance of Departments in Producing Talent in Cameroon

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Abstract:- Renewing competitiveness is a permanent challenge in football to ensure its survival, as the world quickly tires of the absence of magic or of the same champion winning every time. Football governing bodies around the world have therefore invested heavily in the detection and training of new talent according to a well-defined planning model. In Cameroon, we have seen a decline in the overall level of football through the absence of results for several years on the continental stage, whether by local clubs or the national team, and this can be explained by the absence of a clear planning policy with regard to the detection of new talent. In this context, the aim of our study was to map the performance of departments in terms of their development ecosystem in producing talent in order to revitalise football in Cameroon. The methodology used consisted of a weighted hierarchical analysis of the various criteria considered in the talent development ecosystem, including the concentration of young people in the departments, as well as the infrastructure, structures such as clubs and training centres that cater for them, and also their educational and health care. The data was collected and processed using appropriate geographic information science tools and software. The results revealed three categories of departmental performance, with only 4 of Cameroon's 58 departments performing very well, 18 performing moderately well in terms of producing talent for the development ecosystem and the rest not performing at all. With a view to planning detections throughout the country, these results are convincing and will enable FECAFOOT decision-makers to draw on clear studies to launch the new generation of Cameroonian football, and also to identify concrete areas for improvement in the less successful departments.

Keywords:- *Football, Weighted Hierarchical Analysis, Talent Development Ecosystem, Cartography, Geographic Information Sciences*

I. INTRODUCTION

Football brings together more than 270 million people every year (FIFA-The Big Count, 2006), which is why it is necessary to think about its renewal on and off the pitch. FIFA President Gianni Infantino wants to 'shape a footballing landscape where 50 national teams and 50 clubs from all over the world are capable of winning a world title', through the constant emergence and development of new talent. The report 'Strengthening Global Competitiveness-An Analysis of the Talent Development Ecosystem' published by FIFA in 2021 indicates that the most effective federations are those that adopt the four-stage planning model: 'plan, act, reflect, analyse'. In this case, planning means organising future missions to identify new footballing talent in order to ensure continued competitiveness. In Africa, although the winners of the African Cup of Nations have been fairly varied over the last two decades, with 8 different winners out of the 11 editions, there is an imbalance in the CAF Champions League, the flagship competition for African clubs, with 75% of the last winners between 2004 and 2023 coming from North African countries (CAF, 2023), and the last victory by a Cameroonian club dates back to 1980 with Canon de Yaoundé. Since the beginning of the 21st century, the Indomitable Lions of Cameroon have won 2 consecutive titles (2000 and 2002) and 1 title in 20 years (2004-2023) ; they have failed to reinvent themselves and ride the wave of these successes. Cotonsport de Garoua, meanwhile, won 13 local league titles over this period (FECAFOOT, 2023) but failed to win a single one on the continental stage.

As a result, Cameroon's competitiveness is becoming an issue that is being addressed by the major football authorities in Cameroon, who are recruiting players with dual nationality born abroad but with Cameroonian roots to strengthen the national team. This is a temporary solution, as these players, who did not grow up in Cameroon, lack the Cameroonian footballing spirit and have no impact on the level of the local championship. The challenge is therefore to completely renew the forces in the various categories of the Cameroonian leagues and, at the same time, to raise the level of the national youth and pennant teams and to ensure that new talent emerges consistently throughout Cameroon via a good development ecosystem. Beyond the physiological and psychological aspects of the young player, other factors such as quality coaching, balance with studies, the presence and quality of infrastructure, equipment, the competition model, etc., have a decisive impact on performance (Kemal, 2022). Focusing on these elements that make up the talent development ecosystem at the level of each department in Cameroon will enable us to understand the country's talent development policy and propose effective planning for talent detection in Cameroon. Having a constant production and

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24AUG1446

development of new talented young players at departmental level will improve the overall level of Cameroonian competitive football from the amateur leagues through the first division championship to the national pennant team for the best.

So how can we participate in the decision-making process with a view to better planning the detection of footballing talent throughout Cameroon in order to revitalise football in Cameroon on a permanent basis ?

The aim of this study is to produce a map of the performance of Cameroon's departments in producing talent in relation to their development ecosystem.

➢ *To Achieve this Objective, we will have as Specific Objectives:*

- Identify the factors to be taken into account in the talent development ecosystem in Cameroon ;
- Evaluate the performance of departments in terms of talent production by carrying out a weighted combination of our different factors ;
- Formulate recommendations to improve the detection of football talent in Cameroon.

This study will be divided into three chapters. The first will be devoted to a review of the literature on geographical information sciences in football. The second will set out the methodology used to achieve our objectives, and the third will conclude with an analysis of the results, discussions and a few suggestions.

II. PRESENTATION OF THE STUDY AREA

Cameroon is a country in Central Africa. It is bordered by several countries : Nigeria to the west, Chad to the north, the Central African Republic to the east, Congo and Gabon to the south, and Equatorial Guinea to the south-west. It also has a coastline on the Gulf of Guinea to the west. Due to its geographical position, Cameroon is often considered to be the meeting point between West and Central Africa.

Cameroon has a total surface area of approximately 475,440 square kilometres. This makes it one of the largest countries in Africa. The country stretches some 1,200 kilometres from north to south and some 800 kilometres from east to west. With such a vast territory, Cameroon is home to a wide variety of landscapes, climates and ethnic groups (Universalis.fr, 2023).

Cameroon's varied terrain includes mountains, plateaux, plains and coastal areas. Cameroon's best-known mountain range is the Mount Cameroon massif, an active volcano that is also the country's highest point at 4,070 metres (Cameroon.be, 2019), located near the coast in the South West region. There are also the Mandara Mountains in the north of the country, which are a series of volcanic mountains. Cameroon is criss-crossed by several plateaus, including the Adamaoua Plateau in the centre-north of the country. The Western Plateau, also known as the Bamiléké Plateau, is located in the western region and is characterised by fertile hills and valleys. There are several plains in Cameroon, including the coastal plain that stretches along the Gulf of Guinea in the west of the country. There is also the Northern Plain, which is a vast expanse of flat land in the northern region. Located along the Gulf of Guinea in the west, the coastal zone includes the coastal plain as well as mangroves, lagoons and estuaries. It enjoys a humid tropical climate.

Located in Central Africa, Cameroon has a great deal of geological diversity due to its complex geological history. The country is made up of several distinct geological units, formed at different times and in different geological contexts. These include the Precambrian, Coastal Sedimentary Basin, Western Plateaux, Northern Range and Cameroon Volcanism.

Located along Cameroon's Atlantic coast, the sedimentary basin is mainly made up of sedimentary deposits of Cretaceous to recent age. It contains sand, clay and limestone formations, as well as hydrocarbon deposits. This basin is of great economic importance because of its oil and gas reserves. The Western Plateaux are characterised by high plateaux and mountains, including the Bamboutos and Manengouba mountains. The rocks in this region are mainly of volcanic origin, including basalts, trachytes and phonolites. The western plateaux are also rich in minerals such as iron, bauxite and gold. The Northern Mountain Range crosses northern Cameroon and forms part of the Pan-African belt. It is composed of metamorphic rocks, including gneisses, schists and quartzites. The Northern Range is renowned for its deposits of minerals such as uranium, cobalt and diamonds. Cameroon is also home to several active volcanoes, including Mount Cameroon, the country's highest peak. These volcanoes are the result of volcanic activity associated with the Atlantic ridge and the East African rift zone. Volcanic rocks such as basalts and phonolites are common in these regions.

Cameroon has a dense hydrographic network, with many major rivers, the most notable of which are the Sanaga, Bénoué and Logone. These rivers play an important role in water supply, irrigation and transport.

The Sanaga River is the longest river in Cameroon. It rises in the mountains in the west of the country, flows through the centre and empties into the Atlantic Ocean. The Sanaga River is vital for water supply, irrigation and the production of hydroelectric power. The River Bénoué is a major tributary of the River Niger. It flows through the north of Cameroon, forming part of the border with Nigeria. The River Bénoué is important for navigation and irrigation in the region. The Logone River is another major waterway in Cameroon. It rises in the mountains in the west of the country, marks part of the border with Chad, and then joins the Chari River before flowing into Lake Chad. The Logone River is vital to the region's water supply and agriculture.

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Although most of Lake Chad lies outside Cameroonian territory, part of its shores are in the north of the country. Lake Chad is a shallow lake and its size can vary considerably depending on rainfall. It is of great ecological, economic and cultural importance to the region.

Cameroon is also home to other important lakes, such as Lake Nyos, Lake Manoun and Lake Awing. These lakes are often located in volcanic craters and are of scientific and tourist interest.

Cameroon's demography is characterised by a rapidly growing population and ethnic diversity. According to 2023 estimates, Cameroon's population is approximately 28.647 million, distributed unevenly across the country (CameroonPopulation, 2023). The most densely populated regions are generally found in urban areas and in certain southern regions, such as the Littoral and Centre regions. The northern and extreme northern regions have lower population densities. It is known for its great ethnic diversity, with over 200 different ethnic groups. The main ethnic groups include the Bamilékés, the Bétis, the Fangs, the Bamouns, the Doualas, the Peuls, the Ewondos, the Bassas, the Bakas and the Maka. Each ethnic group has its own language, customs and cultural traditions. Urbanisation is increasing in Cameroon, with a growing proportion of the population living in urban areas. The country's main cities include Douala, the largest city and main economic centre, Yaoundé, the political capital, Garoua, Bamenda, Maroua and Ngaoundéré. Cameroon has a high fertility rate, with an average of around 4.56 children per woman in 2023. (CameroonPopulation, 2023) However, efforts have been made to promote family planning and access to reproductive health services in order to reduce the rate of population growth Cameroon has a relatively young population, with a high proportion of young people under the age of 25. This young population presents both opportunities and challenges in terms of education, employment and economic development.

Cameroon is a Central African country with a diversified and growing economy. Cameroon's socio-economic activity is influenced by several key sectors, including agriculture, natural resources, industry, trade and services.

Agriculture plays a crucial role in Cameroon's economy, employing a large proportion of the working population. The main crops include cocoa, coffee, cotton, bananas, maize, rice and wood products. Cameroon is also rich in natural resources, including oil, natural gas, aluminium, uranium, diamonds and gold. The industrial sector is growing, with activities such as agricultural processing, mining, aluminium production, energy production, construction and manufacturing. Cameroon is also known for its timber sector, exporting timber and timber products to other countries. The tertiary sector, which includes trade and services, is experiencing significant growth. Cameroon's major cities, such as Douala and Yaoundé, are important commercial centres. Tourism is also a growing sector, thanks to the country's diverse flora and fauna, as well as its national parks and tourist sites.

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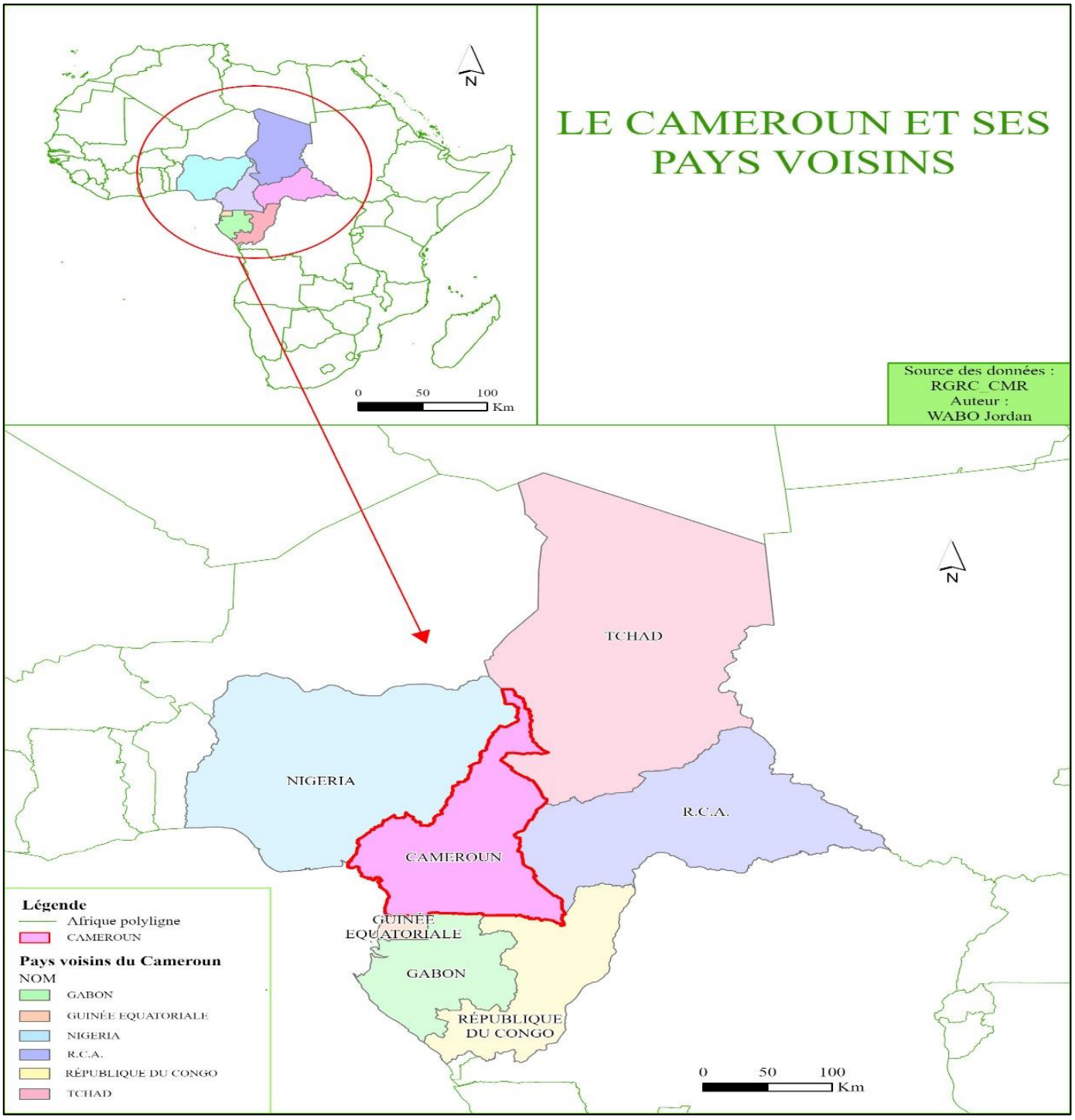

Fig 1: Location of Cameroon

III. METHODOLOGY

A. Data

The various data required for our study will include population data by department, which will be used to identify the population of our study in each department after calculations have been made, produced by MINSANTE; information on the development environment of these young people over 20 years by department in terms of the structures that take them in and train them to play football, educate them and provide for their care (clubs, training centres, schools and health areas); data on the FECAFOOT-approved stadiums that allow football to be played under suitable conditions in Cameroon; the departmental origin of Cameroonian internationals who have taken part in major continental and intercontinental competitions over the last two decades.

B. Data Processing Methodology

The approach adopted is based on a spatial approach incorporating multi-criteria analysis. In order to draw up the map of areas containing groundwater, the hierarchical multicriteria analysis (HMA) method developed by Saaty (1980) was used to assign weights to the various criteria according to their importance. This method is based on a two-

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24AUG1446

by-two comparison of the various hazards, using a square matrix to evaluate the importance of one criterion in relation to another, using a scale developed by Saaty. Once the comparison matrix has been filled in, we calculate the eigenvalue of each and the corresponding eigenvector. The eigenvector indicates the order of priority, while the eigenvalue is used to assess the consistency or quality of the solution obtained.

➢ *Hierarchical Multi-Criteria Formulation and Elaboration of the Various Criteria*

The AHP method is based on breaking down a problem into a hierarchical structure, with each level made up of specific indicators. This hierarchical structure highlights the indicators that will have the greatest impact on the final decision.

The development of criteria is the first fundamental step in determining performance in talent production. The choice of criteria is based on observations made by countries such as France and England, and studies conducted by organizations like FIFA on the elements of the talent development ecosystem required for optimal growth ; they represent the characteristics deemed essential for good development. The criteria will be evaluated using the spatial analysis functionalities of geographic information sciences, with each evaluation resulting in a map representing the suitability of all surfaces for the criterion in question. In order to evaluate these criteria, we will first identify and classify the components of the talent development and detection ecosystem through the following Table 1.

Table 1 : Components of the Talent Development Ecosystem

Components	Role
Club	A structure whose presence is necessary to introduce competitive football to young players.
Training center	Physical and mental training for young talent.
Stadium	An essential infrastructure for the practice of football.
Education	The young player should be able to follow a normal academic course that aligns with their training hours.
Health	Since football is a contact sport, the presence of healthcare facilities is very important for minor ailments or more urgent interventions.

➢ *The Criteria Adopted in the Light of these Various Components are as Follows :*

- The structural criterion composed of the professional club factor and the training center factor ;
- The environmental criterion consisting of the school establishments factor and the health areas factor ;
- The infrastructural criterion composed of the stadium factor ;
- The demographic criterion composed of the young population factor and the Cameroonian internationals factor.

➢ *Categorization and Standardization of Criteria*

The implementation of criteria cards requires a prior standardization of the various factors, this step based on continuous reclassification allowing for the quantification of the different factors according to their performance.

➢ *Weighting Of Criteria*

A multi-criteria analysis often leads the decision-maker to consider that the factors are not of equal importance, so a weighting must be assigned to each of them. This phase involves comparing the various criteria to determine the importance of their contribution to solving the problem. The weighting of criteria forms the basis of any multi-criteria operation, as it has a direct influence on the results. Saaty (1980) developed a comparison scale for each level.

Once the degrees of importance have been assigned, the weight of the criterion is determined by applying formula (1).

$$Criteria\ weight = (Line\ sum)/(Number\ of\ criteria) \quad (1)$$

➢ *Consistency Check*

The consistency index measures the reliability of the comparison expressed in consistent judgments. The larger the index becomes, the more inconsistent the judgments expressed in the comparison matrix would be, and vice versa. In order to test the consistency of the response, which indicates whether the data are logically related, Saaty (1980) proposes a verification procedure based on the formulas in the following equations:

$$\alpha_{moy} = \sum \left(\sum ci.wi \right) \quad (2)$$

$$IC = \frac{\alpha_{moy} - n}{n - 1} \quad (3)$$

$$RC = \frac{IC}{CA} \quad (4)$$

With:

moy: average coherence
ci: column
wi: weight
n: number of elements
IC: coherence index
RC: coherence ration

And
CA: Random Coherence

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Saaty's experiment defines a consistency ratio (CR) as the ratio of the consistency index to the random index of a matrix of the same dimension. The coherence ratio measures the logical consistency of experts' judgments, and can be used to assess the coherence of judgments using the pairwise comparison method. It provides information on the consistency in terms of ordinal and cardinal importance of the criteria to be compared. In general, for criteria of less than nine, a tolerance threshold of 10% is set for the consistency index. This implies that if the consistency ratio is greater than 0.1, then there is inconsistency in the pairwise comparisons, and the matrix resulting from the comparisons will have to be re-evaluated. To judge consistency acceptable, the consistency ratio should therefore be less than 10%.

➢ *Criteria Aggregation*

Once the criteria have been established and weighted, they will be aggregated by weighted linear combination based on the formula in the equation below:

$$\sum_{i} wi.xi \times \prod_{j} cj \quad (5)$$

IV. RESULTS

A. Representation of the Different Criteria

The decomposition of our problem into different hierarchical levels and their criteria is illustrated in Figure 2.

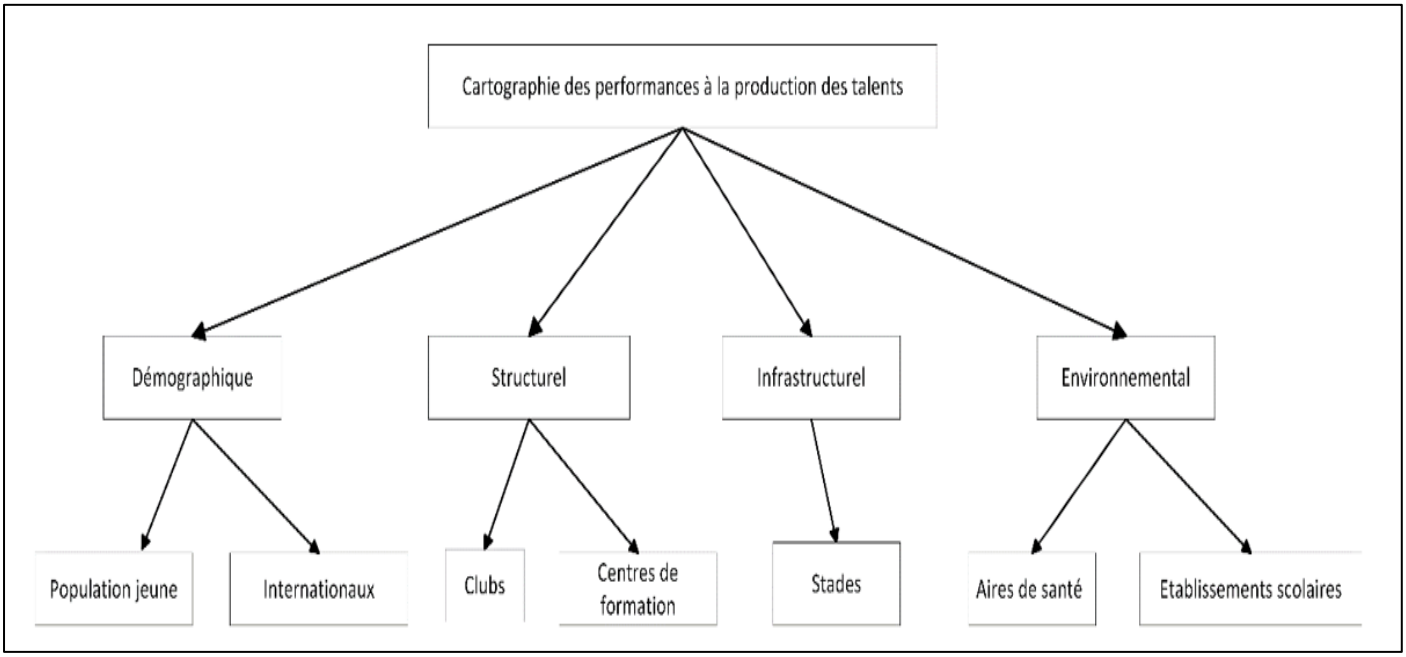

Fig 2 : Hierarchical Structure

➢ *Structural Criteria*

- *Weighting of the Criterion*

For this criterion, a low importance of training centers relative to professional clubs is considered. The resulting matrix is presented in Table 2.

Table 2 : Binary Comparison Matrix

Factor	Training Centers	Professional Clubs
Training centers	1	3
Professional clubs	0.33	1
Sum	1.33	4

We normalize our matrix by calculating the sum of each column. Each element is then normalized by dividing it by the sum of its column. This results in the normalized comparison matrix shown in Table 3.

Table 3. Normalised Binary Comparison Matrix

Factor	Training Centers	Professional Clubs	Sum
Training centers	0.75	0.75	1.5
Professional clubs	0.25	0.25	0.5

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- Weight of Factors

The weight of the factors is determined by applying formula (1). The results are obtained in Table 4.

Table 4 : Weight of Different Factors

Factor	Weight
Training centers	0.75
Professional clubs	0.25

➢ *Environmental Criteria*

- *Weighting of the Criterion*

Regarding the environmental criterion, a moderately equal importance is considered for health areas compared to educational establishments. The resulting binary matrix is given in Table 5.

Table 5: Binary Comparison Matrix

Factor	Health areas	Schools
Health areas	1	2
Schools	0.5	1
Sum	1.5	3

We subsequently normalize the matrix and obtain the normalized binary comparison matrix from Table 6.

Table 6: Normalised Binary Comparison Matrix

Factor	Health areas	Schools	Sum
Health areas	0.67	0.67	1.34
Schools	0.33	0.33	0.66

- *Weight of Factors*

Applying formula (1) gives the factor weights shown in Table 7.

Table 7: Weight of Different Factors

Factor	Weight
Health areas	0.67
Schools	0.33

➢ *Demographic Criteria*

- *Weighting of the Criterion*

Regarding the demographic criterion, a low importance of the young population compared to international elderly is considered. The resulting binary matrix is given in Table 8.

Table 8: Binary Comparison Matrix

Factor	Young Population	International
Young Population	1	3
International	0.33	1
Sum	1.33	4

After normalization, we obtain the normalised comparison matrix shown in Table 9.

Table 9: Normalised Binary Comparison Matrix

Factor	Young Population	International	Sum
Young population	0.75	0.75	1.5
International	0.25	0.25	0.5

- *Weight of Factors*

Applying formula (1) gives the factor weights shown in Table 10.

Table 10: Weight of Different Factors

Factor	Weight
Young population	0.75
International	0.25

➢ *Criteria Mapping*

The maps of the different criteria, after standardization and reclassification according to the adopted model, are then obtained and presented in Figure 3 below. They will be used to create a performance map for each department in Cameroon's talent production.

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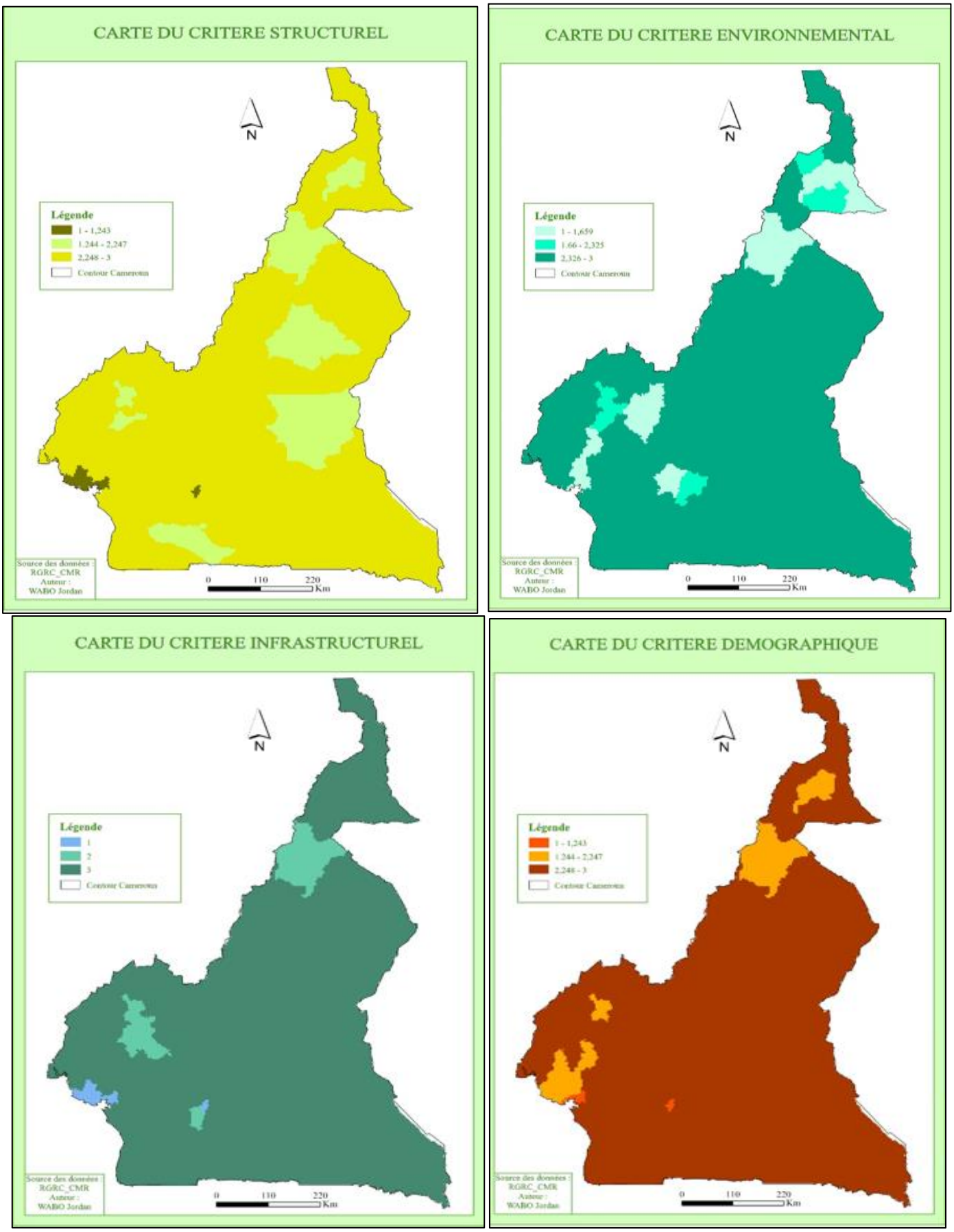

Fig 3: Criteria Cards

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B. Talent Production Performance Mapping

➢ *Weighting of Criteria*

The considerations made previously allow us to obtain the matrix given by Table 11.

Table 11: Comparison Matrix

Criteria	Démographics	Structural	Infrastructurel	Environmental
Démographics	1	3	4	5
Structural	0.33	1	2	5
Infrastructurel	0.25	0.50	1	3
Environmental	0.20	0.20	0.33	1
Sum	1.78	4.7	7.33	14

The normalized matrix is given in Table 12.

Table 12: Normalised Comparison Matrix

Criteria	Demographics	Structural	Infrastructurel	Environmental	Sum
Demographics	0.562	0.638	0.546	0.357	2.103
Structural	0.185	0.213	0.273	0.357	1.028
Infrastructurel	0.140	0.106	0.136	0.214	0.596
Environmental	0.112	0.043	0.045	0.071	0.271

- *Weight of Criteria*

Formula (1) gives us the results shown in Table 13.

Table 13: Weight of the Different Criteria

Criteria	Weight
Demographics	0.526
Structural	0.257
Infrastructurel	0.149
Environmental	0.068
Sum	1

➢ *Assessing the Consistency of Judgements*

The consistency evaluation is initially performed by multiplying each column of the unnormalized comparison matrix by the weight of the associated criterion. The results of this operation are recorded in Table 14.

Table 14: Evaluation of the Consistency of Judgments

Criteria	Demographics	Structural	Infrastructurel	Environmental	Sum
Demographics	0.526	0.771	0.596	0.340	2.233
Structural	0.174	0.257	0.298	0.340	1.069
Infrastructurel	0.132	0.129	0.149	0.204	0.614
Environmental	0.105	0.051	0.049	0.068	0.273

Secondly, the sum of the obtained rows is divided by the weight of the criterion of the row. The results obtained are given in Table 15 below.

Table 15: Weighting of Criteria

Criteria	Weight
Demographics	4.245
Structural	4.160
Infrastructurel	4.121
Environmental	4.015
Average consistency	4.135

- By applying formulas (3) and (4), we obtain:

✓ Consistency index : IC=0.045
✓ Consistency ratio : RC=0.050

RC<0.1 ; The arbitrarily chosen comparison matrix is deemed acceptable.

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➢ *Departmental Performance In Talent Production*

To obtain a map of departmental performance in talent production, we will cross-reference the different criteria maps, each weighted according to its respective importance. The criteria maps were crossed using a raster calculator. The result is presented in Figure 4.

➢ *Extraction of Performance Categories*

From our reclassification tab, we'll bring out the zone classes by maintaining the value of the class to be extracted and assigning the value No data to the other classes. The result is shown in figure 5.

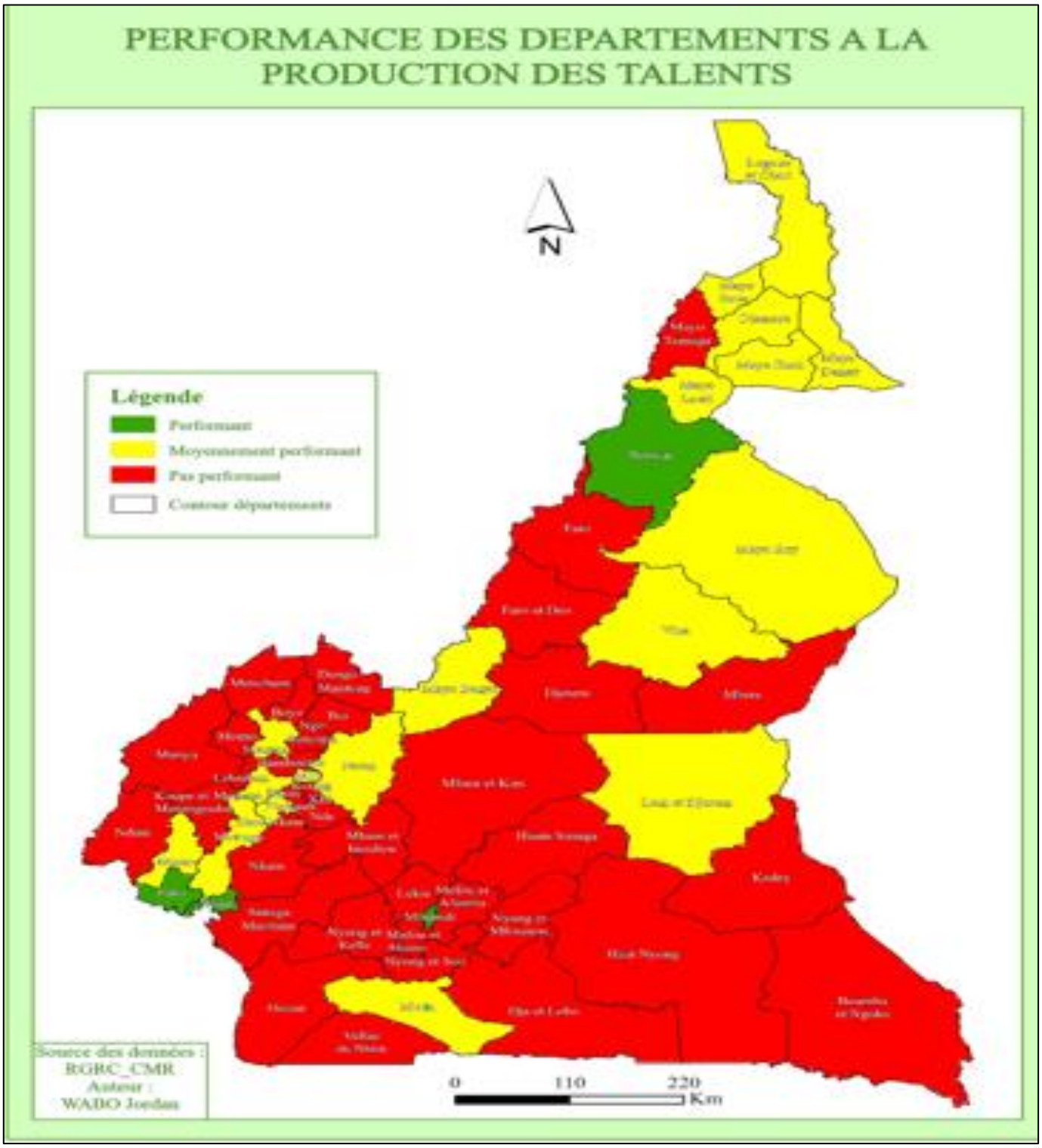

Fig 4: Departmental Performance Map

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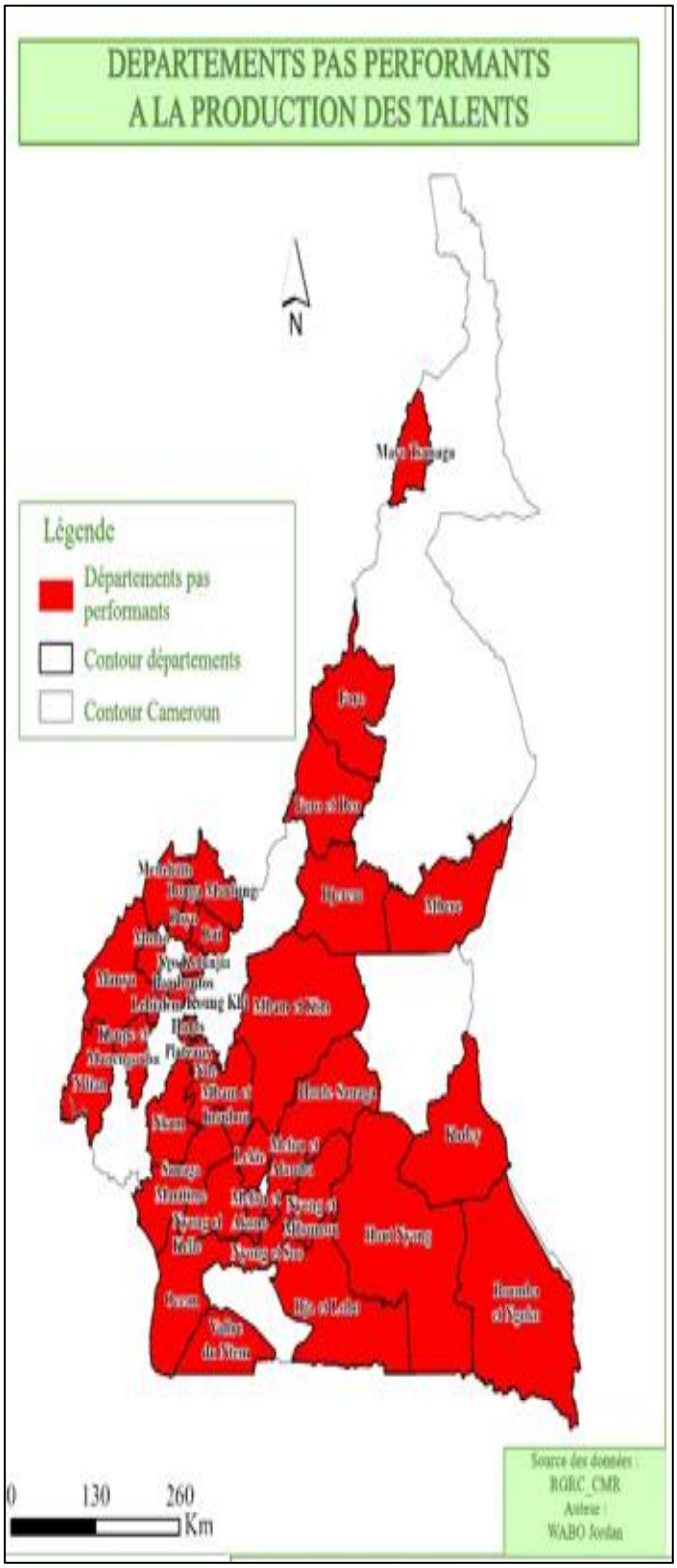

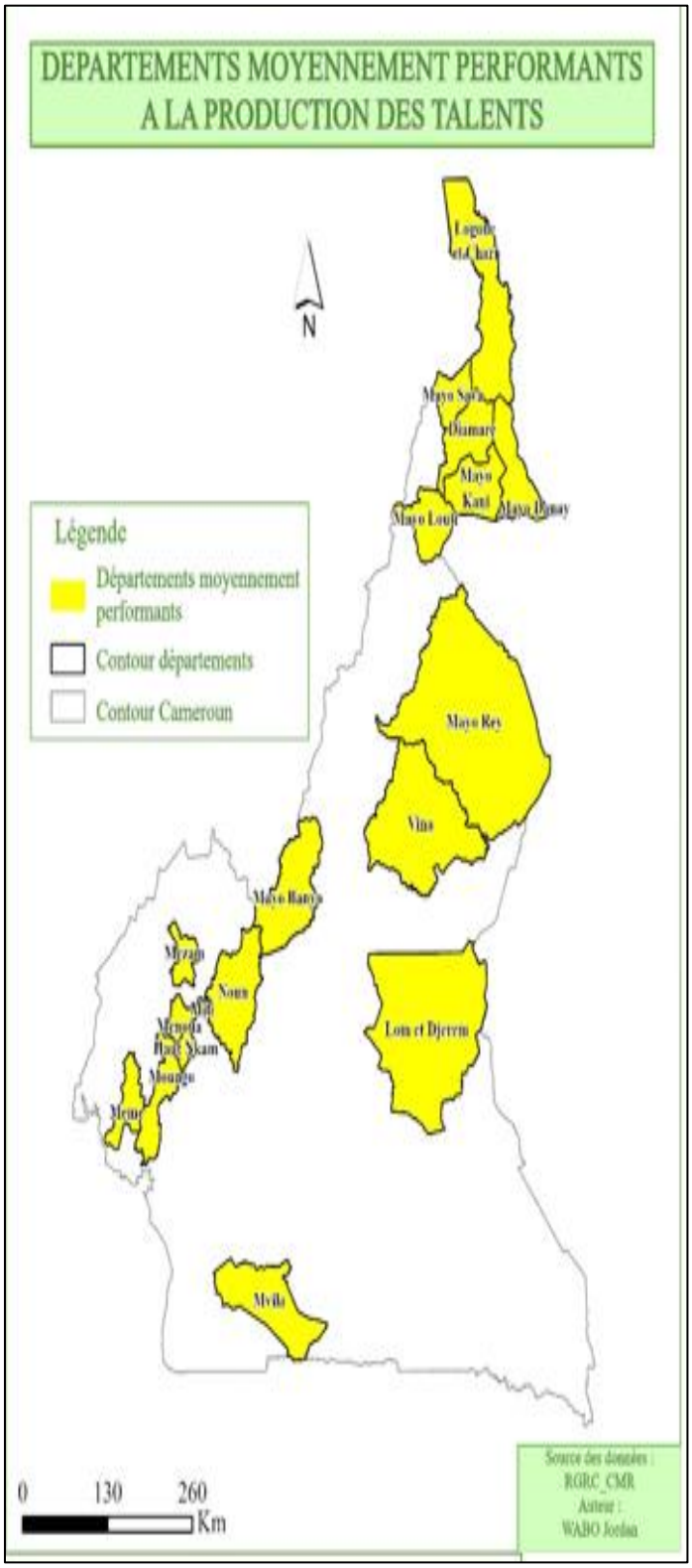

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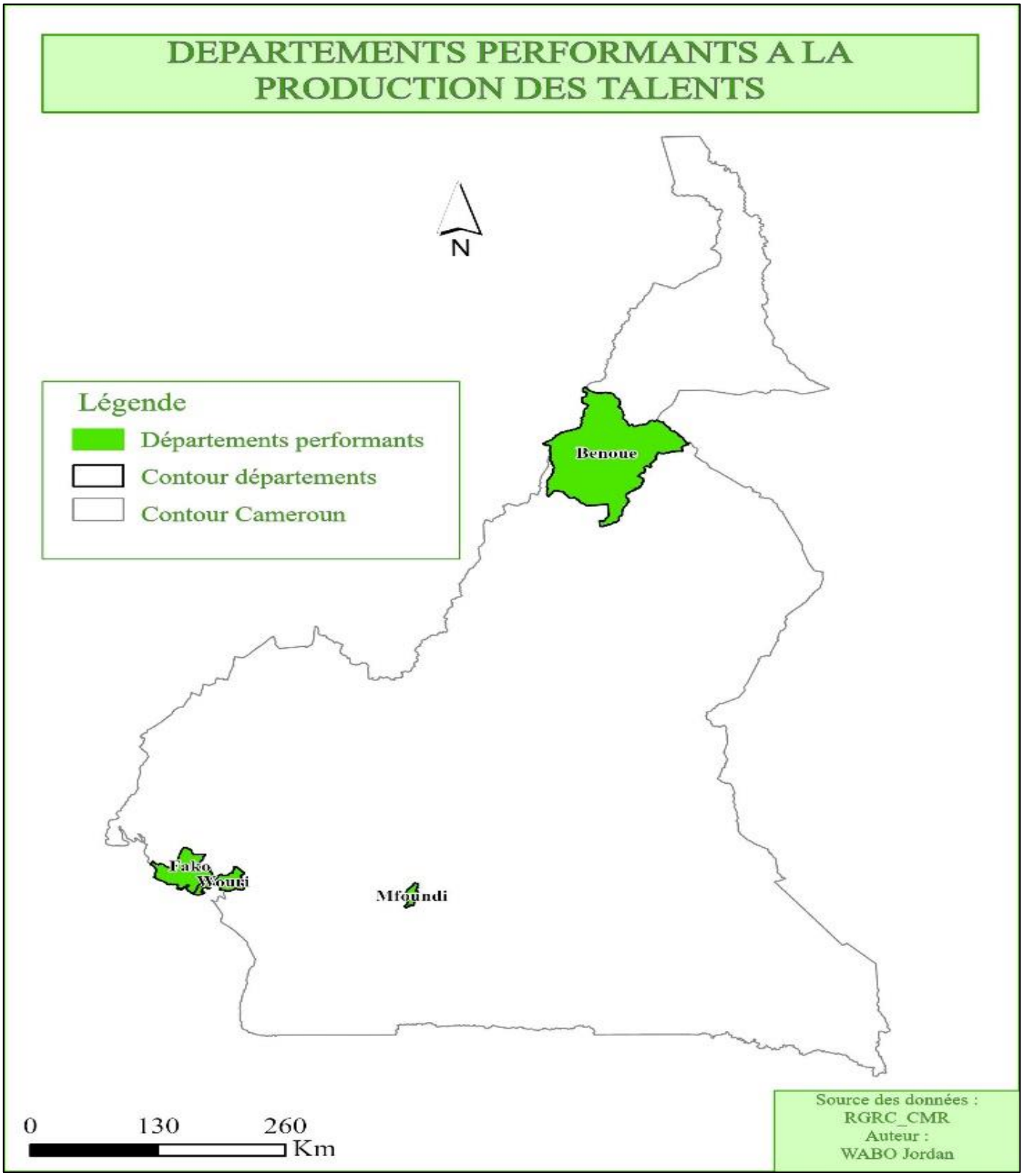

Fig 5: Classification of Departments by Category

V. DISCUSSION

The use of geographic information sciences in football, particularly in the detection of young talent, allows decision-makers to rely on solid and reliable scientific bases for decision-making in order to renew competitiveness in both local and international football. Our study, based on several criteria according to their importance in the talent development ecosystem, after spatial processing on appropriate software, allows us to synthesize the results in the following table 16.

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Table 16: Departmental Performance by Category

CATEGORY	
NOT EFFICIENT	Bamboutos, Boyo, Boumba et Ngoko, Bui, Djerem, Donga Mantung, Dja et Lobo, Faro, Faro et Deo, Haute Sanaga, Haut Nyong, Hauts plateaux, Kadey, Koung Khi, Koupe et Manengouba, Lebialem, Lekie, Manyu, Mayo Tsanaga, Mbam et Inoubou, Mbam et Kim, Mbere, Mefou et Afamba, Mefou et Akono, Menchum, Momo, Nde, Ndian, Ngo Ketunjia, Nkam, Nyong et Kelle, Nyong et Mfoumou, Nyong et So'o, Océan, Sanaga Maritime,Vallée du Ntem
AVERAGE PERFORMERS	Diamaré, Haut Nkam, Logone et Chari, Lom et Djerem, Mayo Banyo, Mayo Danay, Mayo Kani, Mayo Louti, Mayo Rey, Mayo Sava, Meme, Menoua, Mezam, Mifi, Moungo, Mvila, Noun, Vina
PERFORMANCE	Benoue, Fako, Mfoundi, Wouri

High-performing departments are those that truly excel in all considered criteria, making them ideal places for the detection and development of young footballing talents. As for the average and underperforming departments, a detailed analysis can help the governing bodies of Cameroonian football to decide which departments have underutilized or poorly exploited potential and therefore deserve a restructuring of their youth talent development ecosystem :

- The departments in the Far North region, in general, have a moderate performance level due to their large youth population (Logone et Chari, Mayo Danay, Mayo Louti, Mayo Sava), but lack adequate infrastructure, professional clubs, and training centers. The Diamaré department, on the other land, is very well balanced, but is at a stadium of being very successful.
- Other departments with average performance have high potential and should be better exploited: Mezam and Mifi which are balanced, Lom and Djerem, Moungo, Vina and Mvila equipped with structures but not used appropriately given their lack of results, and Menoua and Haut-Nkam, which have infrastructure waiting to be put to good use.
- Among the underperforming departments, some deserve special attention for various reasons: Mefou and Afamba, Bamboutos, and the Hauts-plateaux for their sports facilities and infrastructure; the departments of Ocean, Nyong et Kelle, and Sanaga Maritime, which have produced Cameroonian internationals.

These results also highlight the unequal distribution of structural and infrastructural resources across the entire Cameroonian territory. Indeed, among the most performing departments, Mfoundi and Wouri, which host the political and economic capitals respectively, concentrate a significant proportion of all the considered criteria.

VI. CONCLUSION

This study aimed to create a map showcasing the performance of Cameroon's departments in producing football talents in relation to their development ecosystem, with the goal of promoting and revitalizing competitive football in the country. By developing a structured approach, specific objectives were established, including identifying the factors to consider in the talent development ecosystem in Cameroon, evaluating the performance of departments in producing football talents by performing a weighted combination of our various criteria, and finally, formulating recommendations to improve talent identification in Cameroon. The methodological approach consisted of several successive steps. Based on a documentary research of the field, the associated factors and criteria on which our analyses were based were defined, and the importance attributed to the different criteria allowed for their weighting using the Saaty method to obtain the results.

The combination of demographic, structural and infrastructural, and environmental criteria, made it possible to identify, among the 58 departments of Cameroon, 4 departments with high performance in producing talents (including those hosting the political and economic capitals), 18 with medium performance, and 36 with low performance, demonstrating the poor distribution of football resources across the territory. These results will serve as a basis for decision-making for optimal planning of talent scouting and to balance competitiveness at the local level. However, limitations were observed, notably regarding data accessibility and the criteria considered, which were limited to the Cameroonian context.

As perspectives, this study can be completed by considering the general and specific physical capacities that come into play during the scouting of young talents. Since we already know where to look, we can focus more specifically on mental qualities (tactical ability, self-control), physical qualities (morphological, motor, and muscular qualities), and technical qualities (individual technical skill) and their importance at this age for detecting the most promising talents.

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