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THE SCOPE OF HUMANITARIAN ACTIONS IN RESILIENCE TOWARDS A SUSTAINABLE DEVELOPMENT OF THE URBAN POPULATION

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ABSTRACT

In general, humanitarians come to the aid of the most vulnerable to restore human dignity and alleviate the suffering of families in precarious situations. However, today it is experiencing a major economic and organizational crisis. The initial direct aid has been prioritized and standardized over time with a view to efficiency, making it counterproductive and exposing it to numerous criticisms. The question that arises is to what extent humanitarian aid contributes to the resilience of beneficiaries towards sustainable development.

Indeed, based on the hypothesis that the intervention of humanitarians in the resolution of socio-economic problems of the vulnerable contributes to their resilience towards sustainable development, this study assesses the contribution of humanitarian aid not only in the resilience of vulnerable populations, but especially in the sustainability of their development.

KEYWORDS: Vulnerability, Aid, Humanitarian, Resilience, Sustainable development.

INTRODUCTION

Underdevelopment refers to the situation of a country whose economic, political and social structures do not allow it to satisfy the basic needs of its population; such a country is characterized mainly by massive poverty as well as poor integration into the world economy.

The exposure of the Malagasy population to risks due to various crises: economic and humanitarian, the effects of natural disasters related to global warming have become increasingly strong due to demographic problems: migration, explosion; the drying up of natural resources and cyclical crises of various kinds.

The population of the urban commune of Antananarivo does not escape the climatic disasters that frequently affect the country. The passage of bad weather sometimes leads to situations of economic vulnerability for the residents of the commune (income, housing, health, education) which require humanitarian aid

But in this unstable context, there are constant questions about the role of humanitarian aid programs and their ability to provide efficient and resilient assistance to people in need. The question that arises is to what extent does humanitarian aid contribute to the resilience of beneficiaries towards sustainable development?

A large part of the humanitarian effort in crisis situations is focused on emergency interventions aimed at saving lives, hence the punctuality of the actions of organizations working in this field. But recently, humanitarian actions, known for their proximity and their good knowledge of the population, have as their main mission to reinforce the resilience of the communities in which they intervene and thus to ensure the sustainability of their actions even after their withdrawal.

In line with this vision, this study aims to analyze the impact of humanitarian actions on the resilience and sustainable development of beneficiaries.

Indeed, the humanitarian sector is supposed to do good in its actions, especially in a country where the needs of the vulnerable are constantly growing and are becoming more and more important, such as Madagascar, which has never experienced war but is classified among the least developed countries where the GDP per capita is less than 1 dollar per day.

Madagascar, among the Least Developed Countries of the planet, is the 3rd most vulnerable country to climate hazards after Bangladesh and India, and the 1st in Africa. It is the 2nd most hungry country in the world in 2014¹.

This explains the presence of humanitarian organizations on the national territory whose aim is to satisfy all the needs, and to protect the fundamental rights of the population: right to life, to food, to education, access to basic health services. It concerns the transition from emergency actions carried out at the time of the appearance of natural disasters to longer-term interventions relating to various forms of sustainable human development.

Based on the hypothesis that humanitarian intervention in the resolution of socio-economic problems of the vulnerable contributes to their resilience towards sustainable development, a survey in the form of an opinion poll was conducted on a sample of 300 beneficiaries² of aid in the urban environment of the capital of Madagascar. After presenting a conceptual framework explaining the research topic, the results of the survey, processed and analyzed statistically using SPHINX data processing software, will be presented in order to evoke the realities in the field.

CONCEPTUAL BASIS

For several years now, we have been witnessing the coexistence of short and long term needs and crises. More and more areas and regions affected by man-made crises (wars) are being affected by natural disasters, such as drought or pests. As a result, more and more emergency humanitarian projects are being developed with development aid tools, but always with the same goal in mind: to alleviate the suffering of populations, to save lives while seeking to restore their dignity.

Humanitarianism puts man at the heart of its action, is interested in the good of mankind, seeks to improve the condition of mankind, strives to relieve suffering mankind, to help men in need, in distress and qualifies organizations working for the welfare and happiness of mankind, the improvement of the condition of men or respect for the human being.

According to **Brodiez and Dumons (2009)**³, The term "humanitarian" today refers to organizations working in the national field and those working abroad, including emergency and development actions. Humanitarianism can be defined as an action that aims at the good of humanity or that seeks to improve the condition of man.

¹ PROGRAMME ALIMENTAIRE MONDIAL, Rapport 2015

² Description in appendix

³ **Brodiez and Dumons**, "*Faire l'histoire de l'humanitaire*", 2009.

Emergency action is immediate, while development is long-term. The former is most often carried out without debate with the populations concerned, whereas the latter is based on a participatory process. Moving from one to the other means moving from action on the symptoms to action on the causes (**Claire Pirotte⁴ 1997**).

Emergency and development operations are complementary, according to (**Reymond Philippe, Margot Jonas 2007⁵**), The term humanitarian aid cannot be used for all forms of support. Humanitarian aid includes various fields of action:

- Ensuring survival: covering people's basic needs as quickly as possible in order to ensure their survival (access to drinking water, food, medicine and health care, temporary shelter, etc.).
- Reconstruction: rebuilding basic infrastructure. This includes damaged physical structures.
- Social Rehabilitation: This consists of repatriating displaced persons and refugees to the extent possible, and ensuring their survival in a sustainable manner. It also involves developing vocational and educational programs to revive the economy and social progress.
- Prevention: introducing preventive actions to avoid the return of a new crisis situation, or to reduce the vulnerability of the society

The emergency is the first moment in the humanitarian action. It is necessary to clarify its meaning. Emergency aid is situated in the immediate future. It is directed towards every being in danger of death. It also consists of interventions that are carried out in the here and now, allowing the basic needs of the affected populations to be met. This aid is in the short term (**Claire Pirotte 1997**). In other words, the disaster emergency is an intervention that is carried out in a very early stage and over a very short period of time. It allows the basic needs of the populations affected by a disaster to be met. In other words, it ensures their survival. It is interesting to specify the notion of survival to better understand its meaning. Survival is defined as the prolongation of life beyond certain terms. It is defined as the fact that an individual and a population can maintain itself alive. The level of survival is defined as the essential elements that human beings need to live. We can conclude that in case of a disaster, emergency aid is there to ensure the survival of the victims. Rehabilitation is an intermediate period between emergency and reconstruction. It consists in the revival of the economy. In other words, it is a transitional phase that follows the emergency and extends over a longer period.

Rehabilitation appears to be a concept developed for the needs of actors and the financial mobilization of donors. It is not the result of an in-depth analysis of contexts and field practices. It covers very diverse

⁴ **Claire Pirotte**, « *Entre urgence et développement* », Fnac: pratiques humanitaires en questions, 1997.

⁵ **Reymond Philippe, Margot Jonas**, « *Les limites de l'aide humanitaire* », 2007.

realities and arbitrarily fixed periods of time (**Claire Pirotte 1997**).

Reconstruction is defined as the complete restoration of all services, local infrastructure, repair of damaged physical structures, economic revitalization, restoration of social and cultural life. It must be integrated into a long-term development plan while taking into account the risks, future disasters and opportunities to reduce these risks by taking appropriate measures. It is not necessary to restore damaged structures and services to their original form (**Claire Pirotte 1997**).

Reconstruction concerns the construction of basic infrastructure that has been destroyed or damaged, i.e. housing for people in the camps, administrative buildings, roads, bridges and the complete restoration of basic services.

It is important to note that humanitarian action, marked by urgency and media coverage, has largely taken the place left vacant by development policies, which were indexed on the long term and operated in discretion, and which, in many countries, were swept away in the turmoil that swept away the very States with which they collaborated. As state structures and "public services" collapsed, when crises broke out, it was necessary to act quickly and strongly, to be able to gather large amounts of capital and to set up one-off operations in a specific theater: humanitarian aid took over from development. However, the need to manage the "end of the crisis" by acting on other levers than the strictly medical field quickly becomes apparent: in these conditions, humanitarian aid does not escape the delicate questions of diversifying its methods of intervention and its inclusion in the medium term, which is necessary for the re-establishment of viable structures and the prevention of new crises.

Sustainable recovery is in principle ensured by economic development. This concerns in particular the standard of living, whose indicators are not limited to the level of consumption, but also to the level of education, the health of the population and the protection of the environment. This allows us to guarantee equity, freedom and fundamental rights for everyone. Given this fact, ecology, economy and social are inseparable. The social sustainability of development depends in part on the capacity of individuals and households.

RESULTS

The results presented will concern the evaluation of the vulnerability situation of the beneficiaries of aid as well as their level of resilience and development thanks to the aid in order to be able to analyze thereafter the scope of humanitarian actions in these resiliencies towards a sustainable development.

1. Evaluation de la vulnérabilité

For the overall evaluation of the beneficiaries' situation presented in Table 1, the 5 measurement items are considered reliable because the value of the associated Cronbach's Alpha coefficient is greater than 0.7, which is the only acceptance of the quality of the measurement. We can then deduce from the table of respondents' opinions on their situation before the shock in terms of income, housing, health, nutrition and education that their general living conditions are not too alarming, with the exception of children's education.

Indeed, a little more than half of the respondents declared that their living conditions were sufficient before the shock, except for education, where the other half admitted not to encountering any difficulties. 50.1% of the respondents found their children's access to education sufficient. Note, among other things, the significant dependence resulting from the Chi-square test between the opinions of the respondents and the criteria marking their situations before the shock⁶.

Table 1: Pre-shock status of humanitarian organization members

Opinions/ Situation before shocks	Not at all sufficient	Not sufficient	Sufficient enough	Sufficient	Very sufficient	TOTAL
Source of income	23,1%	17,7%	52,2%	5,0%	2,0%	100%
Housing	24,8%	13,4%	51,5%	7,0%	3,3%	100%
Access to health	11,0%	7,4%	66,6%	12,4%	2,7%	100%
Access to education	10,7%	18,4%	17,7%	50,5%	2,7%	100%
All	15,3%	15,6%	52,8%	13,9%	2,4%	100%

Source: Author, 2021

1.1 Level of risk prevention

The quarterly survey called Mc RAM⁷ (Multi-cluster Rapid Assessment Mechanism) indicates that 29.3% of households were severely food insecure, while 37.3% of households, comprising an average of 4.4 people, earned less than 100,000 ariary per month, or less than 757 ariary per person per day. In short, one third of the inhabitants of Antananarivo are in extreme poverty.

⁶ The dependence is highly significant. $\chi^2 = 433.63$, $ddl = 16$, $1-p = >99.99\%$, p -value is 0.0001 below the 5% risk of error.

⁷ The quarterly survey called Mc RAM is a survey launched by the United Nations system in Madagascar among 503 household's representatives of the population of the capital (in 2010). It is set up to monitor the evolution of the consequences of the socio-political crisis in Antananarivo since January 2009 and to adapt humanitarian responses

Referring to the second group or the second dimension, which evaluates the situation of the beneficiaries before the shock, or more precisely their prevention of the risks of the shock, out of the 5 items that define it, only 4 are retained, given that the value of Cronbach's Alpha coefficient of 0.427 does not exceed 0.7, a threshold that ensures the reliability of the item groups. The elimination of the item accessibility in terms of education allowed to increase the value of this coefficient to 0.712. This state of affairs allows us to show that, in terms of preventing the risks of shocks, the beneficiaries of aid from the two humanitarian organizations before the disruptions focused on securing their lives in terms of income, housing, health and nutrition, even though the level of security of the latter is not rational.

In fact, according to the statistics in Table 2 concerning the opinions of respondents regarding these various elements, more than half of the aid recipients say they have enough security in terms of housing, access to health and nutrition, except for securing sources of income, where 58.9% of respondents agree that there is no security. The opinions of the respondents are considered to be dependent on the life security axes of the respondents if we refer to the results of the Chi-square test of independence which provide a significant p-value of 0.0001⁸. This result ensures the relevance of the information provided.

Table 2: Beneficiaries' opinions on their life security axes before the shock

Opinions/ Security	Not at all secure	Not secure	Somewhat secure	Very secure	TOTAL
Source of income	8,0%	58,9%	25,8%	5,7%	100%
Housing	6,0%	22,1%	55,5%	10,7%	100%
Health Access	6,0%	15,7%	57,5%	3,0%	100%
Access to nutrition	5,4%	25,8%	59,9%	7,4%	100%
Overall	6,6%	28,6%	51,8%	10,0%	100%

Source: Author, 2021

1.2 Level of vulnerability

Vulnerability is an experience of suffering, dependence, and the inadequacy of social and personal relationships, and is defined as the degree of exposure of a person to the risk of losing or not attaining a state of well-being, combined with a reduced capacity to protect and defend oneself from adversities within the framework of social protection. According to a World Bank study, "vulnerability" is defined as the probability of being negatively affected by unexpected events or exposure to shocks. According to the

⁸ The dependence is highly significant. $\chi^2 = 215.09$, $ddl = 16$, $1-p = >99.99\%$.

same study, a vulnerable household is one that has little or no ability to reduce the likelihood of being hit by a shock, to reduce the likelihood of a negative impact should a shock hit, or once hit, to cope with the consequences.

In Madagascar, the majority of the Malagasy population faces many environmental, health, economic and social risks. The population is said to be vulnerable to the extent that any shock could deplete their meager assets and throw them into misery. In Antananarivo, this state of impoverishment is not recent⁹, it is the result of a process. **Godinot (2011)**¹⁰ argues that an urban sub-proletariat emerged in the 1970s, distinguished from the mass of the poor by the extreme precariousness of their work and housing, but also by the contempt in which they are held. It is the case of the homeless families in the capital, affirms **Yves Marguerat**¹¹, who are from the city itself or the nearby rural areas. **Godinot(2011)** notes a specificity of this homeless population compared to other third world cities. In Antananarivo, in addition to young people who have broken away from their families and people who are impoverished, we see entire families living on the streets to earn enough to live on during the day and sleep at night, including fathers, mothers and children.

The level of vulnerability is studied in the situation of the beneficiaries before the shock. It forms the third group of items in the assessment of their situation. 5 items define the measure of this vulnerability. However, the analyses of the Cronbach's Alpha values for the reliability of these 5 items presented in the table of coefficients established previously show that only 3 items are considered reliable. Indeed, the coefficient of Cronbach's Alpha equal to 0.348, which is below the threshold of 0.7, does not allow us to retain the 5 measurement items, so it is necessary to eliminate the two items on health and nutrition, which raises the value of the coefficient to 0.788. We can then suggest that the vulnerability of aid recipients is based mainly on income, housing and education. The level of fluctuation of this vulnerability is presented in Table 3:

⁹ Banque Mondiale, 2011

¹⁰ **Godinot** , « *La force de l'autonomie* », 2011.

¹¹ Voir Yves Marguerat Antananarivo et ses marginalités sociales, in Marguerat Yves (dir), *Garçons et filles des rues dans la ville africaine*, Paris, EHESS, 2003, p. 181 – 196, téléchargeable sur le site des publications scientifiques de l'IRD, [En ligne], Adresse URL : <http://www.documentation.ird.fr/fdi/liste.ph>

Table 3: Beneficiaries' views on the impact of damage on income, housing and access to education

Opinions/ Damage in terms of	Not at all affected	Not affected	Somewhat affected	affected	Very affected	TOTAL
Source of income	3,3%	7,4%	21,1%	60,2%	8,0%	100%
Housing	3,7%	11,7%	16,7%	60,2%	7,7%	100%
Access to education	6,0%	12,4%	64,9%	10,0%	6,7%	100%

Source: Author, 2021

Primarily, we note that there is a dependence between respondents' opinions on their findings in terms of source of income, housing, and access to education. The associated chi-square test provides a significant p-value of 0.001¹². The statistics in the table show that the majority of the beneficiaries of humanitarian aid agree on their vulnerability on these 3 criteria. More precisely, almost 60% of them declare to be affected by the damage.

In short, on the three dimensions that measure the situation before the shock of humanitarian aid recipients, we can say that their situation is precarious but not so critical.

1.3 Correlations of the dimensions of beneficiaries' situation before the shock

The correlation analysis of the different dimensions of the household situation before the shock through Student's t-tests allows us to better describe the situation of the latter. It is worth noting the significance of the different correlations between the three dimensions according to the values of the p-values, all of which are less than 0.0001, which underlie very significant dependencies. Thus, by exploiting the values of the correlation coefficients presented in Table 4, we can rule out the fact that before the shock that households undergo, their levels of risk prevention and vulnerability are in fact correlated with their situation before the disasters.

¹² The dependence is highly significant. $\chi^2 = 444.34$, $ddl = 16$, $1-p = >99.99\%$.

Table 4: Correlation matrix on dimensions of beneficiaries' situation before the shock

Variables	Pre-disaster situation of households at risk	Level of risk prevention	Level of vulnerability
Pre-disaster status of households at risk	1		
Level of risk prevention	0,5942	1	
Level of vulnerability	0,2164	0,3203	1

The values in bold are all significantly different from 0. The p-values from the different Student's correlation T-tests are well below 0.

Source: Author, 2021

According to Table 5, the positive correlation coefficients of 0.5942 and 0.2164 between the situation of households before the shock and their level of hazard prevention, on the one hand, and the situation of households before the shock and their level of vulnerability, on the other hand, reflect the fact that the more critical the situation of households before the shock, the less equipped they are and the more vulnerable they are to shocks and hazards.

Table 5: P-values on dimensions of beneficiaries' situation before the shock

Variables	Pre-disaster situation of households at risk	Level of risk prevention	Level of vulnerability
Pre-disaster status of households at risk	0	0,0000	0,0002
Level of risk prevention	< 0,0001	0	< 0,0001
Level of vulnerability	0,0002	< 0,0001	0

Source: Author, 2021

2. Level of resilience of beneficiaries

Resilience is the ability to face life's challenges and persevere. To be resilient is to be able to get back up after a fall, no matter how difficult it is. Resilience can also lead to long-term development.

2.1 Measuring motivation

Based on previous findings, four items, all of which were found to be reliable, were used to measure this motivation. The motivation of the recipients of aid from humanitarian organizations is almost total if we refer to the statistics in Table 6, a contingency table of the respondents' opinions on the motivation evaluation criteria below where the vast majority representing more than 90% are unanimous.

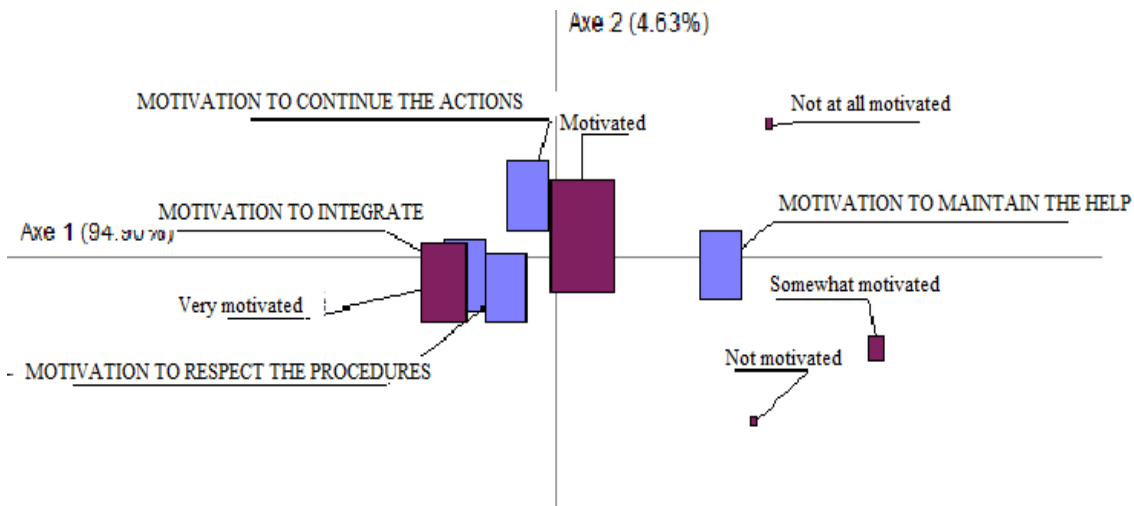
Table 6: Aid recipients' views on their motivations for assistance

Opinions/Motivation	Not at all motivated	Not motivated	Somewhat motivated	motivated	Very motivated	TOTAL
Integrate with aid programs	0,70%	0,70%	3,00%	58,90%	36,80%	100%
Comply with procedures	0,70%	1,00%	3,70%	59,90%	34,80%	100%
Continue with actions	1,00%	0,70%	3,30%	62,90%	32,10%	100%
Maintain skills	1,30%	1,30%	7,70%	65,20%	24,40%	100%
Overall	0,90%	0,90%	4,40%	61,70%	32,00%	100%

Source: Author, 2021

The chi-square test with a significant p-value of 0.0479 below the risk of error of 0.05 shows a dependence between the opinions of the respondents on the elements measuring their motivation¹³. Thus, the factorial analysis of the correspondences or AFC allowed us to have a better view of the opinions of the respondents on their motivations with a level of coverage of 99.63% of all information, through the perceptual map exposed in figure 1 below:

Figure 1: Perceptual map of aid recipients' opinions on their motivation



Source: Author, 2021

¹³ La dépendance est significative. $\chi^2 = 21,17$, $ddl = 12$, $1-p = 95,21\%$.

Exploring figure 1, we can confirm that, given that the red squares represent the number of respondents in relation to their surface area, the beneficiaries are motivated to join the programs offered by the humanitarian organizations and to comply with the rules required by the latter. It should also be noted that once integrated into the programs, many of them declare that they are more interested in the future. The motivation to maintain the assistance offered by the beneficiaries is also expressed through this illustration of the opinions of the respondents, as very few declare that they are not in favor of it, given the proximity of the small area of the red square to the non-motivation of the maintenance of the assistance acquired.

2.2 Capacity to adapt

Resilience emphasizes the capacity of populations affected by shocks to react and adapt. This is a major advantage of the concept: it allows us to move away from a miserabilistic approach, of passive populations that owe their salvation only to external intervention. It is in this sense that the measurement of the capacity of needy families to adapt to the aid or assistance offered by humanitarian organizations was carried out in this research through 5 items and where, according to the previous results, one item representing the criteria for access to education is considered unreliable as a test of adaptation. This situation shows that education is still a secondary priority for needy families.

Table 7: Aid recipients' opinions on their ability to adapt to aid or assistance provided by humanitarian organizations

Views on Adaptation/Types of Offerings	Not at all easy	Not easy	Somewhat easy	Easy	Very easy	TOTAL
Sources of Income	4,7%	9,4%	62,1%	18,1%	5,7%	100%
Housing	5,7%	18,4%	14,4%	52,5%	9,0%	100%
Health Access	3,3%	6,4%	10,4%	70,9%	9,0%	100%
Access to nutrition	5,0%	18,1%	16,4%	51,8%	8,7%	100%

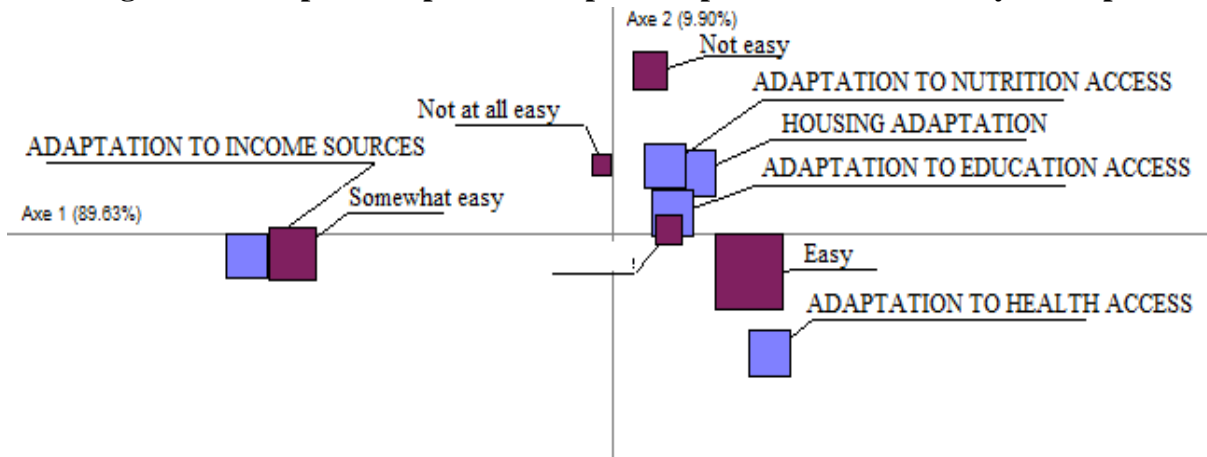
Source: Author, 2021

The opinions of the respondents regarding their ability to adapt to the other types of offers of the organizations are judged to be dependent on the latter according to the significant p-value of the chi-square test and that the statistics in table 7 show that the adaptation to the offers by the beneficiary families is judged to be easy by more than the majority in terms of housing, health and nutrition aids.

The factorial analysis of the correspondences through the perceptual map exposed in figure 2 representing the 99,83% of the initial information allows to better illustrate the opinions of the respondents of their capacity of adaptation to the aid provided by the humanitarian organizations. The small red square and the large red square illustrating respectively the number of respondents who find it very easy to adapt to

the offers and the number of respondents who find it easy to adapt to the assistance offered are in the figure in the vicinity of adaptation to housing and access to nutrition and health. Consequently, we can say that the assistance offered is not considered as a hindrance to the recovery of needy families after the shock they have suffered, given their ability to adapt.

Figure 2: Perceptual map of aid recipients' opinions on their ability to adapt



Source: Author, 2021

2.3 Evaluation after aid

The effectiveness of any project depends above all on the final state or situation of the project's intervention area.

In our case, it is necessary to analyze the situation of the needy families after the aid or assistance offered by the humanitarian organizations in order to draw the value of the latter. It is worth mentioning that some information on this subject has already been presented at the beginning of the presentation of the empirical results of our thesis, more precisely in the section on the characteristics of the sample. The enrichment of this information is essential in order to be able to better observe the level of resilience of aid recipients.

Also, 5 items are put to the tests of evaluation of the scope of the aid and assistance provided by the organizations to the beneficiaries more precisely of their way of life in matters of sources of income, the capacity of housing to accommodate the family, the accessibility to health, nutrition and education of the children. As mentioned at the beginning of this section, the item on the evaluation of the scope of the organizations' aid on housing was not considered reliable for the objectivity of this expertise, so the answers to the 4 remaining items allowed us to focus the results of our analyses first on the significant

dependence established by the chi-square test¹⁴, of the opinions of the respondents to the criteria for evaluating the situation of the beneficiaries after the aid and then the trends in the opinions of the respondents as a result of the factorial analysis of the correspondences.

Table 8, a contingency table of respondents' opinions about their situation after the intervention of humanitarian organizations following the shocks they experienced, shows that overall, the impacts were quite positive according to 50.1% of respondents. 62.9% expressed that access to health was sufficiently assured following the aid provided and more than the majority were also convinced that their access to nutrition and education was sufficient.

Table 8: Beneficiaries' opinions on evaluation criteria after humanitarian aid

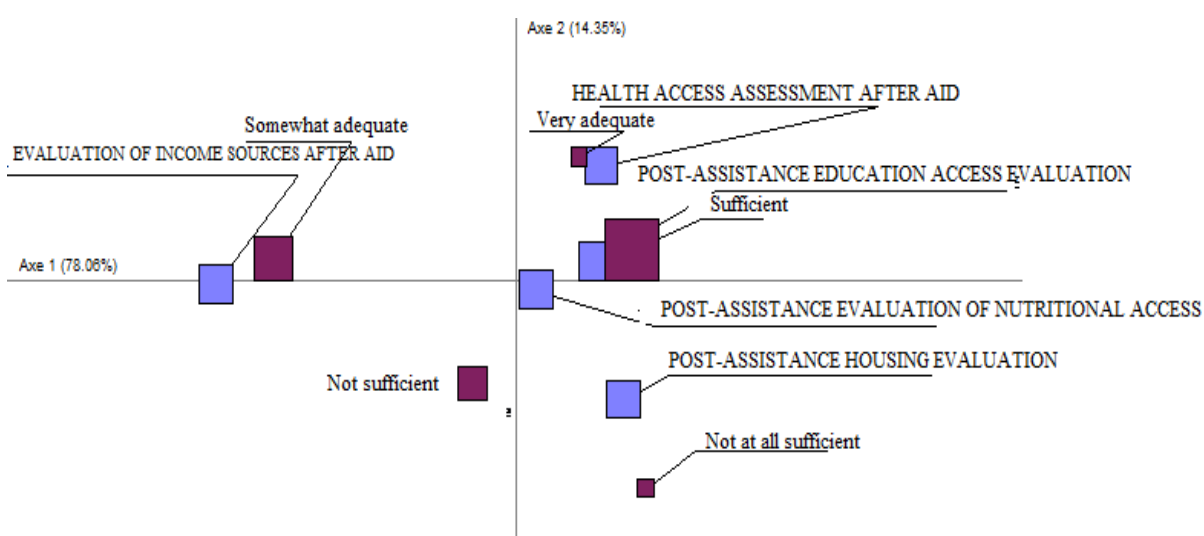
Opinions/Criteria evaluation after aid	Not at all sufficient	Not sufficient	Somewhat sufficient	Sufficient	Very sufficient	TOTAL
Sources of income	2,3%	17,7%	60,5%	15,7%	3,7%	100%
Access to health	3,0%	5,7%	17,1%	62,9%	7,4%	100%
Access to nutrition	3,3%	19,4%	21,4%	52,5%	3,3%	100%
Access to education	7,0%	14,0%	15,7%	52,8%	10,4%	100%
Overall	5,8%	13,8%	24,8%	50,1%	5,6%	100%

Source: Author, 2021

The perceptual map of beneficiaries' opinions shown in Figure 3, which is the result of the factorial analysis, confirms this change in the situation of families receiving aid after the intervention of the two humanitarian organizations, if we look only at access to health, nutrition and education, which are considered sufficient. The proportionality of the red squares to the number of respondents confirms the trend in opinions.

¹⁴ Dependence is highly significant. $\chi^2 = 357.09$, $ddl = 16$, $1-p = >99.99\%$.

Figure 3: Perceptual map of beneficiaries' opinions of their situations after aid from humanitarian organizations



Source: Author, 2021

2.4 Sustainability of development

Humanitarian action, which aims to save lives, alleviate suffering and preserve human dignity during and after crises, faces a wide range of challenges in meeting the needs of populations in and recovering from crisis. To address these humanitarian challenges, actors in the field need to employ solutions that combine humanitarian and development assistance to ensure a more successful transition from humanitarian emergencies to long-term development.

This is one of the directions in which we have focused the assessment of the level of resilience of aid recipients in Table 9. Also, as mentioned earlier, five items were used to measure this level of resilience through the sustainability of development, but the two items relating to the sustainability of improvements in housing and education were not considered reliable. As a result, the analysis of this developmental sustainability focused on sources of income, nutrition and health.

Table 9: Beneficiaries' opinions on the sustainability of development resulting from aid and assistance from humanitarian organizations.

Opinions/ Sustainability in terms of	0 to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	TOTAL
Source of income	34,8%	6,1%	6,1%	2,2%	50,8%	100%
Access to health	34,8%	8,7%	3,7%	2,0%	50,8%	100%
Access to nutrition	34,8%	10,4%	2,3%	1,7%	50,8%	100%
Overall	34,8%	8,7%	3,7%	2,0%	50,8%	100%

Source: Author, 2021

The statistics in the contingency table above speak for themselves and show that the aid provided by humanitarian organizations can either last for a fairly long period of 4 to 5 years for sources of income as well as access to nutrition and health according to just half or 50.8% of the respondents, or for a fairly short period of time not exceeding one year according to another group of respondents representing 34.8% of the respondents. The relevance of this information is justified by the chi-square test, which expresses the dependence of the opinions of the respondents on the sustainability of development in terms of income, accessibility to nutrition and health of the beneficiaries of aid, according to the value of the p-value of 0.003 below the risk of error of 5%.

DISCUSSIONS

The verification of our hypothesis is based on the analysis of the correlation between the duration of development observed by the beneficiaries after the intervention of humanitarian organizations, the evaluation of their situation before the shock as well as their level of vulnerability and the evaluation of the humanitarian aid provided. The results in the correlation matrix below show a priori the significance of the dependencies between the four variables mentioned, marked by two stars to indicate the existence of a very significant correlation.

Thus, we can establish in a first step, the significant impacts on the duration of development noted by the beneficiaries of aid programs of humanitarian organizations of their situation before the shock and their level of vulnerability. The values of the associated correlation coefficients, Pearson's and Spearman's Rho specifically used in the study of the correlation of items or ordinal variables, are all marked with two stars. However, it should be noted that the levels of dependence are quite low, with respective values of -0.109 and -0.220 for the Pearson coefficients and -0.120 and -0.246 for the Spearman Rho coefficients. However, the negative signs allow us to suggest that the development time observed by beneficiaries is less

significant for households whose situation after the shock is fairly critical and similarly for needy households whose level of vulnerability is high.

Furthermore, it should be noted that the opinions of beneficiaries on the importance of humanitarian aid provided in terms of income, housing, health, education and nutrition are not significant in terms of the sustainability of the development observed. The non-existence of stars on the values of the Pearson and Spearman correlation coefficients (equal to -0.084 and -0.093 respectively) reflects these results.

In sum, we can say that the beneficiary households notice or not the importance of the humanitarian aid offered, the duration of the development they noticed can be ephemeral as well as stable or continuous. Let us also note through the results of our analyses in the correlation matrix, the existence of a very strong and significant relationship between the situation of households before the shock and their consideration of the importance of aid provided by humanitarian organizations.

The positive and identical values of 0.934 for both Pearson's and Spearman's coefficients indicate that severely affected households cannot but fully appreciate the support of all types that humanitarian actions offer them.

The various correlation analyses of the variables shown in Table 10, in particular the duration of development observed by beneficiaries after the intervention of humanitarian agencies, the evaluation of their situation before the shock, their level of vulnerability and the evaluation of the humanitarian aid provided, taken together, demonstrate the validity of the hypothesis that the intervention of humanitarian agencies in resolving the socio-economic problems of the vulnerable contributes to their resilience towards sustainable development.

Table 10: Correlation matrix

	Correlation	Evaluation before Disaster	Evaluation of humanitarian aid	Level of vulnerability	Sustainability of Development
Pre-disaster assessment	Pearson	1			
	Rho of Spearman	1			
Evaluation of humanitarian aid	Pearson	,934**	1		
	Rho de Spearman	,934**	1,000		
Level of vulnerability	Pearson	,021	,022	1	
	Rho of Spearman	,011	,011	1	
	Pearson	-,109**	-,084	-,220**	1
	Rho of Spearman	-,120*	-,093	-,246**	1

** . The correlation is significant at the 0.01 level (two-tailed).

Source: Author, 2021

CONCLUSION

The international aid chain has always included specialized actors, some for so-called emergency situations, others for so-called development situations. The first allows us to respond to the basic needs of populations affected by a crisis; humanitarian aid provides immediate relief in an emergency situation. The second allows populations to rebuild their lives. The results of this study, which analyzes the impact of humanitarian actions on the resilience of beneficiaries towards sustainable development, show that the intervention of humanitarian organizations in resolving the socio-economic problems of vulnerable people contributes to their resilience towards sustainable development.

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APPENDIX

Table 11: Descriptive Statistics of Sample Identity

Variables	Fashion	Modalities	Frequency (%)	Lower terminal IC (95%)	Upper terminal IC (95%)
GENRE	Woman	Female	57,33	51,74	62,93
		Male	42,67	37,07	48,26
RANGE AGE GROUP	31 to 40 years old	20 to 30 years old	25,42	20,48	30,35
		31 to 40 years old	38,46	32,95	43,98
		41 to 50 years old	19,73	15,22	24,24
		over 50 years old	16,39	12,19	20,58
NUMBERS OF DEPENDENTS	3 à 5	3 à 5	61,54	56,02	67,05
		5 à 7	10,70	7,20	14,21
		Less than 3	23,75	18,92	28,57
		more than 7	4,01	1,79	6,24
LEVEL OF EDUCATION	high school	Other	1,00	0,00	2,13
		Never	1,67	0,22	3,13
		Primary	20,40	15,83	24,97
		middle school	23,41	18,61	28,21
		high school	50,17	44,50	55,83
		university	3,34	1,31	5,38

Source: Author, 2021