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COVID-19 Regional Safety Assessment Using Evaluation Based on Distance from Average Solution (EDAS)

Gayatri Parasa

Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation gayathriparasa20@gmail.com

M. Arulselvi

Department of Computer Science & Engineering, Annamalai University, Tamilnadu.

marulcse.au@gmail.com

Abstract.

corona virus disease 2019 (covid-19) is caused by a virus infectious disease, which is serious acute respiratory syndrome corona virus 2 (sars-cov-2). 2019 the first was in wuhan, china in december a known case was identified. This disease is worldwide spread rapidly, and as a result the covid-19 pandemic has occurred. Symptoms of covid-19 vary but mostly fever, cough, headache, fatigue, difficulty breathing, smell loss and loss of taste are included. Virus fourteen for one day of attack symptoms after days may appear. Among the victims at least one-third noticeable symptoms not created. Patients noticeable enough to be classified as among those who develop symptoms most (81%) were mild first moderate symptoms (mild up to pneumonia) develop, while 14% were severe produce symptoms (dyspnea, hypoxia or 50% more lung damage), and 5% had vital signs (respiratory failure, shock or multiple organ failure). Older people have severe symptoms are at high risk of developing some recover for months multiple effects (long covid) continue to enjoy, too damage to organs observed. Chronicity of the disease many more to explore the effects annual surveys are ongoing. As vaccine research progresses, virus transmission and prevention and different stages of recovery successes, as well as some specific ones emerging threats in the region and where they are up-to-date information on a complete analysis of it is very important to have. May appear (white spots). Countries, regions and required by international organizations all data is available to confirm that, statistics experts, data scientists, physicians and others concerned tight between the parties there should be cooperation. However, the vaccine's final remedial science and medicine as far as the reach of society, negative and to reduce the effects also great for neutralizing to plan strategic actions corona virus pandemic one to face an important

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challenge. This considering, deep knowledge the group's new covid-19 specialty analytical case study, its included in the analysis in 250 countries and territories each achieved economic, social and health sustainability classify, analyze designed to perform and rank. By covid-19 induced global health and in the fight against economic crisis weaknesses, opportunities and threats or risks. This special analysis conclusions presented in the case study and the recommendations are total whether accepted regardless, the present an opening for analytical discussion point and current and post-epidemic protection a for governments to improve there should also be evidence that is the purpose of deep knowledge group.and stability, and every for the specific region, their health of the population and to maintain economic well-being, it is also a great way to reverse the collateral damage caused by covid-19 as a tool for establishing projects. based on the distance from the mean solution evaluation (EDAS) is a new and efficient MCDM is proper. In this way alternatives are preferred based on their distance from the mean solution is determined. From the analysis in which EDAS (Avg evaluation based on distance from solution) method is the best solution. Short range and negative the ideal is the solution with the longest distance from the solution determines, but of these distances the comparison is not significant. From the result it is seen that France is got the first rank where as is the Iran is having the lowest rank.

Keywords: Covid 19, MCDM, EDAS

INTRODUCTION

Appeared in December 2019 covid-19, the world affected the whole. Hence, covid-19 is different sectors, especially health subject to research in the field. One of these studies, for covid-19 areas determined to be safe of the consortium a report deep knowledge group (dkg) is in the report, isolated performance, risk management government performance, monitoring and detection, health preparedness, regional regression and of emergency preparedness key criteria are countries and regions are used in assessment [1]. Early domestic of the country from wuhan to the stage for 31 provincial-level areas of covid-19 infection risk, probability risk based on the model, china's verdict high-speed train (hsr) network at the provincial level we use spreading. More areas of risk are mainly beijing-hong kong hsr on the southern side of the line we are what is being distributed we see, there in the early stages a large number of infections cases confirmed [2]. Corona virus disease 2019 (covid-19) of china first time in

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wuhan reported severe acute by a novel respiratory syndrome virus 2 it is an acute respiratory disease. The virus is highly contagious because, it is universal epidemic has caused 3. Worldwide there are differences. World health according to the organization's dashboard, dec 10, 20204 in the United States 29.1 with 760.9 thousand deaths millions of cases, in europe 20.9 462.6 thousand deaths million cases, 11.2 million confirmed cases, 170.9 thousand deaths have been confirmed in the south. East asia. It is 2.61%, 2.22% respectively. And calculated as 1.52% corresponds to mortality rates [3]. Epriori of a geographical area and to assess the risk of infection high risk within a country and to identify areas a new data-driven architecture we propose. The risk index is three different is evaluated as a function of the component. Risk of disease, area exposure and the vulnerability of its citizens. As an application, covid-19 in italy we discuss the outbreak. Air pollution, human traffic, winter temperatures, houses concentration, health care density, population size and age history are twenty available in italian using data each of the regions we categorize. Central and in the case of southern italy in some of the northern region's risk of infection is high we assume that there is [4]. Our knowledge of the pathophysiology covid-19, its natural medicine study and possible treatments constantly changing. While we have compiled recent research already on this pandemic for this review in order to provide a thorough perspective, there are several methodological issues that must be taken into account while planning studies and gathering data. Additionally, it is challenging to determine the actual prevalence, occurrence, mortality, and range of the clinical course of the condition because some people who received the vaccination may not have been examined because they were asymptomatic. According to early reports from italy and iceland as well as some in silico modelling of the virus expansion, there may be as many as 50% of infected people who are asymptomatic [5]. Early 2020 from, heavy breathing sars-cov-2 is the cause of the syndrome (covid-19) corona in propagating a novel strand of virus see that the world is not armed contains spread of the virus started in china, but a large number in some months foreign countries are their first reported infection, global connectivity and intensive network of transportation due to. Is rated as on the other hand, data shared by multiple countries this is the death rate of the population age and affected cities for health system performance to vary accordingly show evidence [6]. As of october 5, 2020, there had been over 200,000 confirmed sars-cov-2 fatalities reported in the country, with over 7 million confirmed cases. Despite significant lockdown orders and masking, sars-cov-2 other non-prescription drugs such as disease transmission through interventions prevention efforts

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2020 since late summer in america, especially the south and in the western regions are resurgent. Of fall 2020 initially in the midwest in the area. Public health, economic recovery and k–12 schools, colleges and universities again opening of cases are threatened by the increase [7]. 35 of the study participants percent before lived together, due to covid-19 (20 percent) another detected and traveled with the person reported. This individual may be exposed to covid-19 were considered members of society. 8.8% of the participants personal protection equipment (ppe) without removal or replacement because of that, 6.3 percent baer with covid-19 patients even before communication then the hands properly 5% due to failure to wash more due to failure to wash considered endangered. With the patient's surroundings after contact take hands properly. Additionally, 3.8% of individuals are biological splashing of liquid (in the eyes) biological material such as experienced a related event. This is the covid-19 virus tough for nurses that would cause danger considered. Personal protective equipment (ppe) removal and replacement, with covid-19 patients even before communication then the hands properly for failure to wash 6.3 per cent, of patient's interaction with surroundings hands after having failure to wash properly 5%. In addition, 3.8% persons biological fluid splash (in the eyes) such as biology material related event enjoyed. Covid-19 virus to these nurses can cause serious danger it was considered that [8]. To increase their resilience and be able to respond to various threats brought on by anthropogenic sources, such as pandemics, urban systems need synergistic measures. The coronavirus disease from 2019 (covid-19) spread quickly over the globe in 2020. Because of covid-19's wide distribution and protracted duration, the pandemic has grown into a serious hazard to public health around the world. As of the end of September 2020, 33,563,030 confirmed cases and 1,005,218 fatalities had been reported worldwide due to the covid-19 disaster. In addition, the covid-19 epidemic has created several problems and seriously disrupted society, the economy, and the environment [9]. The global spread of the corona virus disease (covid-19) during the year 2020 has had a negative impact on public health worldwide and posed a major threat to human health. The covid-19 is still spreading despite the nation's concerted coordination to stop the outbreak. As a result, the precise identification of the current epidemic high-risk locations and the evaluation of the epidemic risk level in various areas are both crucial requirements for the creation of epidemic preventive programmed. Covid-19 is getting more and more active as the northern hemisphere's winter season draws near, making the prevention of a second covid-19 outbreak still a significant problem for the management of the global epidemic [10]. We

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advise the following precautions since head and neck exams are regarded as high risk in individuals with suspected or verified covid-19. Routine, noncurrent visits should be postponed depending on the local situation at the moment, such as the rate of community spread and case doubling time, to reduce the risk of sars-cov-2 infection among patients or healthcare staff while they are visiting the institution [11]. The availability and protection of the staff has a significant impact on the capacity and response of health care. Healthcare workers (hcws) are more likely to contract an infection than the general public due to workplace contact to infectious droplets and other potentially infectious items. Because they may infect not just the patients, they care for but also other hcws with whom they collaborate, it is crucial to control the epidemic's consequences on hcws. Socialise, which would have a negative impact on already severely constrained health service capacity [12]. Due to the outbreak of covid-19 unprecedented many global catastrophes it wreaks havoc on countries. Every country is affected by the virus how is it affected. To understand that, risk on a global scale to assess, the elderly information with number and infectious disease prevalence index as two existing ones using symbols regression based we provide analysis. People living in the population. Additionally, at six-time intervals each country is strict calculate the position, a temporary in our modeling we have combined the elements [13]. The 2019 new coronavirus disease (covid-19) has wreaked havoc in nearly every region of the world. 1 it is upending economies, civilizations, public health systems, and private lives worldwide. 2-4 in fact, covid-19 has significantly increased morbidity and death in many different parts of the world. As of september 27, 2020, the who states that there have been over 32 million (32000000) confirmed cases of covid 19 worldwide, with over 990000 deaths, or a case fatality rate of 3.1% [14]. From case reporting data is for all countries most available current and accessible is the data. So, in theory, such data efficiently use at your own risk national to evaluate strategic and tactical and to guide decision making a method can be provided. Covid-19 nationally rapid for infections, effective, accurate, whereas easily accessible risk requirement for assessments while fulfilling, effects of information gaps reduce case reporting clear, using Comprehensible integration we started building the model. Information. Check the model check sensitivity we tried to analyze [15]. A cross-sectional study of hcws in treatment facilities in the greater accra and ashanti areas who were managing covid-19 cases was done. An estimated 600 healthcare professionals, including both clinical and non-clinical staff, operate at the 4 treatment sites. Quantitative information was gathered to better understand

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the covid-19 viral exposure levels among hcw. Greater accra and ashanti regions were purposefully chosen because they are ghana's covid-19 epicenters, with the greater accra region alone accounting for more than half of the country's confirmed cases.[16]

1. MATERIALS & METHODS

Alternative: Quarantine Efficiency, Government Efficiency, Monitoring and Detection, Healthcare Readiness, Regional Resiliency, Emergency Preparedness.

Evaluation preference: India, Bulgaria, Iran, Italy, France, Greenland

Quarantine Efficiency: Despite the paucity of data, of infections and deaths in reducing the no that isolation is important proved. According to the results, quarantine will begin soon when very efficient and cheaper. Thus, the public are effectively protected. Quarantines are contagious to control the spread of diseases used by governments is a tool. Any symptoms absent but by disease for victims, isolation is used. Incidentally to prevent the spread of an infection they are in isolation are kept apart from others.

Government Efficiency: The world bank group developed the government effectiveness index, which evaluates a government's credibility in its commitment to improving or maintaining quality in the public sector, the civil service, the development of policies, and their execution. This measure covers 193 countries and has an effectiveness range of -2.5 to 2.5. More effective. It is one of several distinct performance indicators used by the government.

Monitoring and Detection: A proactive and sophisticated approach to cyber security known as monitoring and detection aggressively hunts for risks, continuously monitors cyber security, supports quick breach incident analysis, and reacts to threats in the system before they become a problem.

Healthcare Readiness: Communities can be severely affected by disasters and public health emergencies, often with little notice. When a disaster occurs, communities depend on medical professionals to act quickly to provide life-saving care. To save lives and safeguard patient health, healthcare professionals must be prepared to move fast, frequently utilizing cutting-edge methods and new goods, caring for a huge number of patients, offering specialized treatment, and more. Planning and collaboration are both necessary to meet these obstacles. The health care readiness programs of aspr help hospitals, healthcare facilities, and health care systems across the country to meet the complex difficulties of disaster health care by

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coordinating life-saving care and increasing the resources available during a disaster or public health emergency.

Regional Resiliency: The regional resiliency assessment program (rrap) seeks to increase a region's essential infrastructure's resilience by fostering knowledge and action among public and private sector stakeholders. The rrap process requires strong collaborations between representatives from the federal, state, local, and territorial governments as well as businesses in a variety of fields. Owners and operators of facilities in the private sector, businesses, agencies responsible for emergency response and recovery, utilities, planning commissions, law enforcement, academic institutions, and research facilities are all included in this. The essential infrastructure within the defined area is normally the subject of an annual data collection and analysis process for each rrap project, which is followed by ongoing technical support to increase the resilience of the infrastructure. One-off projects might include a wide range of analytical techniques and prospects for

Emergency Preparedness: The word describes the actions you take to ensure your safety before, during, and after a crisis or incident. Your safety in both natural and man-made calamities depends on these plans. Preparedness is due to disasters stress and grief and reduce anxiety helps. Families, communities and people all are fire accidents what to do if it happens must and severe for protection during storms where to go should know that

Evaluation Based on Distance from Average Solution (EDAS): From average settlement assessment (EDAS) based on distance a new efficient MCDM is correct. In this way alternative choices are theirs averaged over distance the solution is determined. EDAS multi-criteria solution approach, a gap in the literature EDAS to overcome the shortcomings of approaches, interval newly adapted for type data. Bank branches to solve the problem for sorting, EDAS is a multi-criteria solution for sorting, EDAS is a multi-criteria solution a new change in approach is cashovers first proposed by gorabai et al (2015). This change is due to ren et al toniolo (2018) proposed interval EDAS it's important to consider the approach corrects weaknesses. In this segment, sec EDAS a new change of the interval kind data technique for solving the trouble is proposed. In this section, first the classical EDAS technique is defined a new gap after which the proposed EDAS technique is supplied [17]. This the most important objective of observation is speleothem development and relative importance of governing parameters also study seepage dynamics in karst environments is to understand. EDAS device european geo a earth is the result of physicists' demands

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environmental parameters in physics laboratory a system was developed to monitor [18]. Average settlement rating (EDAS) from in terms of distance a recently developed several criteria is one of the decision-making techniques. It is similar to EDAS techniques, because it's measurements is based on however, EDAS methodology is positive and negative at its best better than solutions based on average solution selects an alternative. Distances to the best solution simplifying the calculation and the final result it has the advantage of getting faster [19]. Encephalo dura arterio synangiosis (EDAS) is a commonly used indirect process, which is on the surface of the brain replaces the scalp artery. This is some relatively simple with complications has advantages and established co does not cause any damage to the cycle. Recently, a standard treatment for children with mms EDAS is widely used. Additionally, EDAS adults with mms good medical practice for patients showed results. A long EDAS by park et al long-term outcome is better than direct blood flow reconstruction proved to be. However, some additional surgery after EDAS in patients' other studies suggest that treatments are needed, this is due to poor collateral vessel formation [20]. EDAS method of positive and negative distances limits indicate limits. Additionally, different risk of selection makers approaches can be taken into consideration this manner. So, four-branch EDAS for MCDM in fuzzy environment a through problem paper method creates a new model. In the model, with a deviation stability analysis incorporating the entropy weighting technique, the quant the interval of the package the weight vector is a deterministic one the weight vector is integrated. And a composite weight vector is a non-multiobjective linear control is determined by programming [21]. EDAS (from the average settlement estimate based on distance) method by keshavers korapai et al proposed. Mcdm's efficient and as a relatively new method, initially inventory dealing with classification. Gradually, it is other mcdm is extended to handle problems, lately including engineering issues [22]. The average solution (EDAS) developed by ghorabaee et al of distance from method based on assessment.a new multi-criteria for inventory classification decision making method (MCDM) a compromise is that mcdm is perfect. EDAS method by peng and chong neutrosophic extended to soft decision making. Kalina et al. Multiple criteria for decision making introduced l1 measurements in edas system. Liang et al. The purest of gold mines elimination and choice to evaluate productivity with translating reality (electre) approaches integrated edas. Li et al. Ambiguous lot criterion to solve group decision-making problems average solution under linguistic neutrosophic conditions (EDAS) method based on distance evaluating power aggregation operators

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developed an integrated approach [23]. The EDAS method measures the advantageous distance from the mean, and poor distance considers mean, uses the average solution to evaluate alternatives. To consider conflicting criteria this method is very useful when needed will be the method was detected by the authors as claimed, various scale weights EDAS method is stable when with methods used and others are compatible. In add, of the proposed method the simplicity and benefits are immediate the computation is, in particular, these advantages are computational does not affect accuracy [24]. Efficient data for IOT integration program (EDAS). Construction of EDAS like bilinear coupling without using any complicated math operations based on elliptic curve cryptography has IOT terminal, identification and location privileges can be dynamically changed to achieve both pseudo-identity and private key and private key to issue for compromise problem and privilege escalation countermeasure against data using communicates with the center also using 0/1-code technique for solving nodes' partial secret key and dummy introducing an expiration date on tokens [25].

- The decision matrix X, which displays how various options perform with certain criteria, is created.

$$D = \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1n} \\ x_{21} & x_{22} & \cdots & x_{2n} \\ x_{31} & x_{32} & \cdots & x_{3n} \end{bmatrix} \qquad (1)$$

- Weights for the criteria are expressed in equation 2.

$$w_j = [w_1 \quad \cdots \quad w_n], \text{ where } \sum_{j=1}^{n}(w_1 \quad \cdots \quad w_n) = 1 \qquad (2)$$

- Next criteria vice average solutions are calculated

$$AV_j = \frac{\sum_{j=1}^{n} k_{ij}}{n} \qquad (3)$$

- PDA is expressed in equation 4

$$PDA_{ij} = \begin{cases} \frac{\max(0,(x_{ij} - AV_{ij}))}{AV_{ij}} & | \ j \in B \\ \frac{\max(0,(AV_{ij} - x_{ij}))}{AV_{ij}} & | \ j \in C \end{cases} \qquad (4)$$

- The NDA is expressed in equation 5

$$NDA_{ij} = \begin{cases} \frac{\max(0,(AV_{ij} - x_{ij}))}{AV_{ij}} & | \ j \in B \\ \frac{\max(0,(x_{ij} - AV_{ij}))}{AV_{ij}} & | \ j \in C \end{cases} \qquad (5)$$

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➢ Using equation 2 multiplied by factors 4 and 5, respectively, the weighted sum of the positive and negative distances from the average solution for all options is normalised.

➢ Weighted sums of the positive and the negative distance are calculated by the equation

$$SP_i = \sum_{j=1}^{m} w_j \times PDA_{ij} \quad (6)$$

$$SN_i = \sum_{j=1}^{m} w_j \times NDA_{ij} \quad (7)$$

➢ Equations 8 and 9 are used to normalise the weighted sum of the positive and negative distances from the average solution for all alternatives.

$$\mathrm{NSP_i} = \frac{\mathrm{SP_i}}{\max_i(\mathrm{SP_i})} \quad (8)$$

$$\mathrm{NSN_i} = 1 - \frac{\mathrm{SN_i}}{\max_i(\mathrm{SN_i})} \quad (9)$$

➢ The final appraisal score (ASi) for each alternative is calculated as the normalised weighted average of the positive and negative distances from the average solution for all alternatives.

$$\mathrm{AS_i} = \frac{(\mathrm{NSP_i} + \mathrm{NSN_i})}{2} \quad (10)$$

where $0 \leq \mathrm{ASi} \leq 1$.

RESULT AND DISCUSSION

TABLE 1. COVID-19 Regional Safety Assessment

	Quarantine Efficiency	**Government Efficiency**	**Monitoring and Detection**	**Healthcare Readiness**	**Regional Resiliency**	**Emergency Preparedness**
India	50	60	53	28	58	66
Bulgaria	48	53	64	65	60	39
Iran	42	49	53	40	60	64
Italy	47	54	62	54	62	46
France	61	45	61	50	61	66

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Greenland	46	48	55	35	75	53
AVj	**49.00000**	**51.50000**	**58.00000**	**45.33333**	**62.66667**	**55.66667**

Table 1 shows the Alternative: Quarantine Efficiency, Government Efficiency, Monitoring and Detection, Healthcare Readiness, Regional Resiliency, Emergency Preparedness. Evaluation preference: India, Bulgaria, Iran, Italy, France, Greenland in the above tabulation. From the above table the other value are be calculated.

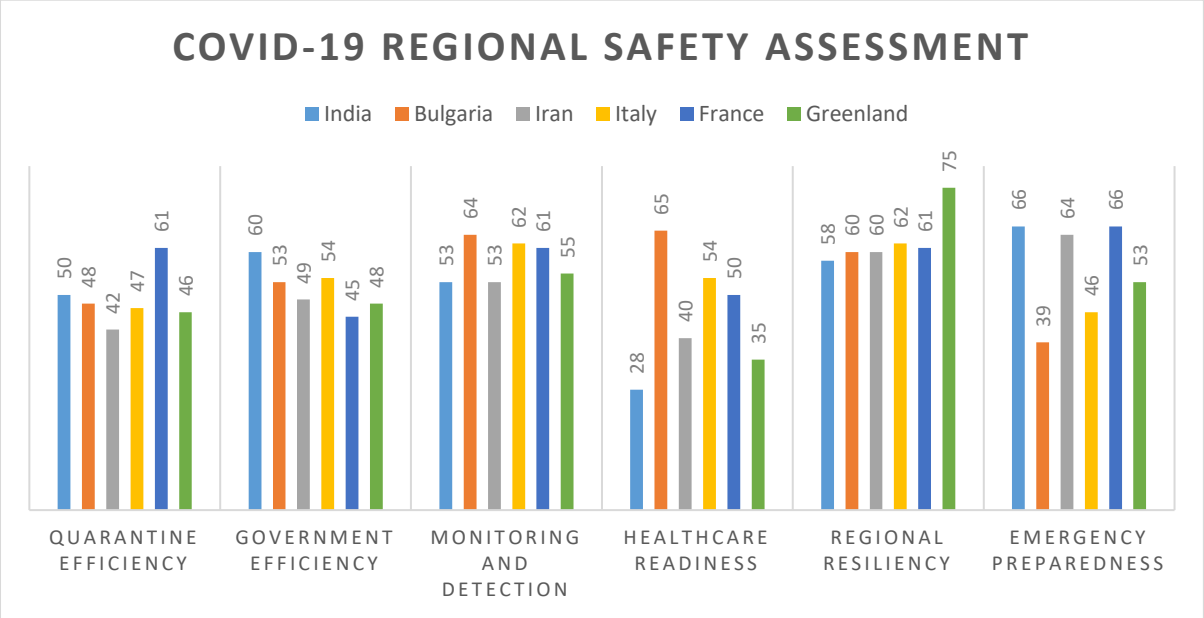

FIGURE 1. COVID-19 Regional Safety Assessment

Figure 1 Shows the Quarantine Efficiency it is seen that France is showing the highest value for Iran is showing the lowest value. Government Efficiency it is seen that India is showing the highest value for France is showing the lowest value. Monitoring and Detection it is seen that Bulgaria is showing the highest value for India, Iran is showing the lowest value. Healthcare Readiness it is seen that Bulgaria is showing the highest value for India is showing the lowest value. Regional Resiliency it is seen that Italy is showing the highest value for India is showing the lowest value. Emergency Preparedness it is seen that France is showing the highest value for Italy is showing the lowest value.

TABLE 2. Positive Distance from Average (PDA)

Positive Distance from Average (PDA)

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0.020408	0.165049	0	0	0	0.185629
0	0.029126	0.103448	0.433824	0	0
0	0	0	0	0	0.149701
0	0.048544	0.068966	0.191176	0	0
0.244898	0	0.051724	0.102941	0	0.185629
0	0	0	0	0.196809	0

Table 2 shows the positive distance from the average it calculates from the average of the first table these value is calculated for the later calculation to get the final rank.

TABLE 3. Negative Distance from Average (NDA)

Negative Distance from Average (NDA)					
0	0	0.086207	0.382353	0.074468	0
0.020408	0	0	0	0.042553	0.299401
0.142857	0.048544	0.086207	0.117647	0.042553	0
0.040816	0	0	0	0.010638	0.173653
0	0.126214	0	0	0.026596	0
0.061224	0.067961	0.051724	0.227941	0	0.047904

Table 3 shows the negative distance from the average it calculates from the sum of the average of the first table these value is calculated for the later calculation to get the final rank.

TABLE 4. Weight

Weight					
0.25	0.25	0.25	0.25	0.25	0.25
0.25	0.25	0.25	0.25	0.25	0.25
0.25	0.25	0.25	0.25	0.25	0.25
0.25	0.25	0.25	0.25	0.25	0.25
0.25	0.25	0.25	0.25	0.25	0.25
0.25	0.25	0.25	0.25	0.25	0.25

Table 3 shows the Weight value 0.25.

TABLE 5. Weighted PDA (SPi)

Weighted PDA	**SPi**

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0.005102	0.041262	0	0	0	0.046407	0.092771
0	0.007282	0.025862	0.108456	0	0	0.1416
0	0	0	0	0	0.037425	0.037425
0	0.012136	0.017241	0.047794	0	0	0.077171
0.061224	0	0.012931	0.025735	0	0.046407	0.146298
0	0	0	0	0.049202	0	0.049202

Table 5 shows the Weighted PDA the value of weighted PDA are product of the positive distance average to get the SPi value.

TABLE 6. Weighted PDA (SNi)

Weighted NDA						**SNi**
0	0	0.021552	0.095588	0.018617	0	0.135757
0.005102	0	0	0	0.010638	0.07485	0.090591
0.035714	0.012136	0.021552	0.029412	0.010638	0	0.109452
0.010204	0	0	0	0.00266	0.043413	0.056277
0	0.031553	0	0	0.006649	0	0.038202
0.015306	0.01699	0.012931	0.056985	0	0.011976	0.114189

Table 6 shows the Weighted NDA the value of weighted NDA are product of the Negative distance average to get the SNi value.

TABLE 7. Spi & Sni & ASi

	Spi	**Sni**	**ASi**	**Rank**
India	0.634126	0	0.317063	4
Bulgaria	0.967884	0.3327	0.650292	2
Iran	0.255814	0.193765	0.22479	6
Italy	0.527495	0.585459	0.556477	3
France	1	0.718598	0.859299	1
Greenland	0.336314	0.158874	0.247594	5

Table 7 shows the Material selection the final result of this paper the India is in 4th rank, the Bulgaria is in 2nd rank, the Iran is in 6th rank, the Italy is in 3rd rank, France is in 1st rank, Greenland is in 5th rank, the final result is done by using the EDAS method.

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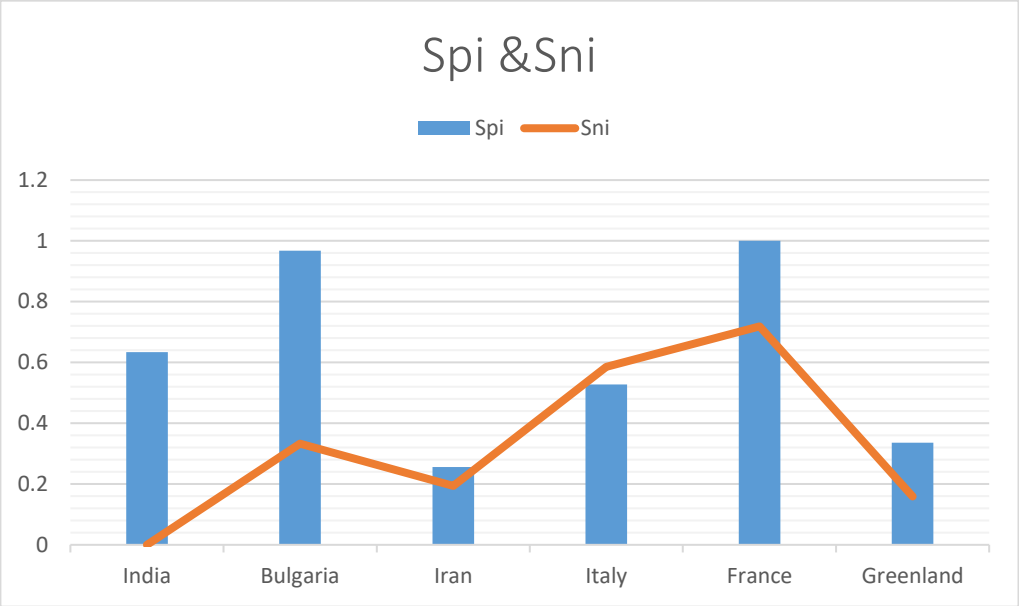

FIGURE 2. Spi & Sni

Figure 2 shows the graphical representation Material selection SPi refers to positive average value and SNi refers to negative value.

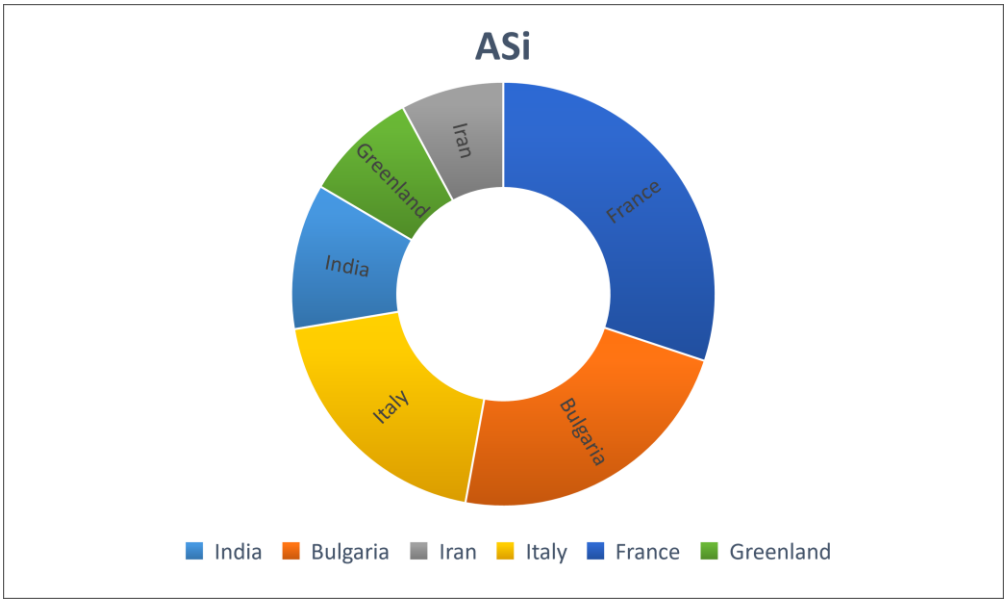

FIGURE 3. ASi

Figure 3 shows the graphical representation Material selection ASi value. Calculate the average value for positive and negative values.

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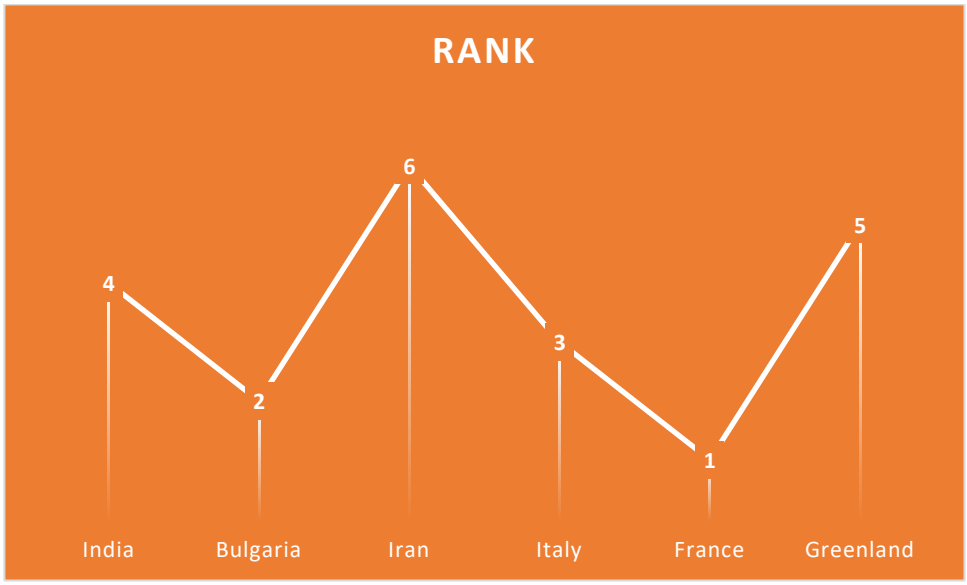

FIGURE 4. Rank

Table 4 shows the Material selection the final result of this paper the India is in Fourth rank, the Bulgaria is in Second rank, the Iran is in Sixth rank, the Italy is in Third rank, France is in First rank, Greenland is in Fifth rank, the final result is done by using the EDAS method.

CONCLUSION

This framework has 6 top levels includes categories (isolated performance, risk management, monitoring and detection, health preparedness, regional resilience and emergencies readiness). Each category is sub contains a matrix of parameters (herein referred to as indicators), whereas each indicator 2-10 quantity or quality supplement a matrix with parameters contains, it is specific related to the topic and from available databases is created. They are current stability of regional conditions, emergency of various regions effectiveness of response efforts specific to affecting related to key factors, and these variables in future studies post-pandemic planning will also address the measures. We are just arbitrary and widespread discontinuity or a reduction in economic activity coming out of time. The health of the world's people and infused with wealth all destruction is still not found. Around the world behavioral scientists to governments as instructed, of a citizen public responsibility for health of public behavior instead of isolation before considering the matter, people total for about three months will tolerate lockdown. Social withdrawal and masking although voluntary also, social distancing and masking with wear etc., general when the behavior was proactive, later, relaxed lockdown regulations which of the following phases of lockdown that

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is expressed as much becomes clear. Also, for months staying at home is for all ages mental, physical and financial damage causes so, of the world what are people and economies. Another lockout in time can't keep up. Nevertheless, there is a risk of a future spike until, the world's health systems getting back to normal can't stand it. Many historical dilemmas as the circumstances, the best way is a technological innovation. Corona by the end of this year creates an antiviral drug many countries are involved in the competition. Are warned to avoid. Treatment and providing vaccinations in joint activities aimed at for countries to focus on in political matters between contradictions were set aside. In the fight against covid-19 the European commission in the lead, members of the European union not only that, but other countries of the world, especially the less developed ones cooperation to implement countries committed to bringing vaccination and other necessary access to supply equipment has a novel, however for vaccination against infectious diseases being the main obstacle in the race lack of data, as the crisis progresses samples are taken from forests want and crisis a minute for not even needing to continue to be used as efficiently as possible want than necessary. This availability of most of the data difficult for example, Afrikaans many statistical significances such as islands difficult areas to sample and data is slow to arrive. Of health system performance positive indicators are mortality positive effect on rates no need to cause measurements indicate that. Conversely, the correlation is 0.1–0.3, this means higher healthcare costs with a high rate of mortality are compatible. From China as far as America and Europe after seeing this virus spreading, spread to other developing countries now we see. We as will be shown later, in asia the second wave is clear expected. Other grown up among the upcoming trends, latin most of America widespread in countries (especially Brazil). Epidemic transmission and in Africa rapid growth of total cases the rate, an increase from june of 8.1 the fold is, however only the share of Africa. Ella 5% from events (which is incorrect can also be attributed to the data). From june 1 to august 16 universality of total cases the growth rate is about 3.5 times was, while latin in the us it is 5.7 times and 6.9 times in Asia. Weak infrastructure and high population density epidemic among speed and extent of spread based on both most of the concerns are with india related to from june 1 in Europe until august 16 (34.1% to 16%) and north america (30.4% to 25.5%) of the total total distribution of cases changed to a region. Middle east average world growth a little less than rates revealed. In april there have been explosions (second strongest in asia due to the initiation of the wave maybe), but june after month there sharper no growth was recorded (in contrast to the United Arab

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Emirates, like Qatar, Saudi Arabia very few countries there are signs of growth. And Egypt too)

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