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**ALTERNATIVE POLICY PRACTICE TO GOVERNANCE
BANGLADESHI MIGRANTS IN INDIA USING ANALYTICAL
NETWORK PROCESS**

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Key words: Illegal Immigration, ANP, Control Criteria, Alternative decision.

ABSTRACT:

Immigration from Bangladesh to India is a complex and gigantic phenomenon since partition of India, which includes both refugees and economic migrants. In present study is an initiative to explore, what decision is better applicable to manage the problem of illegal migration from Bangladesh to India. In order to address the problem, an Analytical Network Process (ANP) used to create a decision model specific to the issue. A large number of control criteria like economic, social, political and environmental are taken as factor to substantiate the seven different alternatives. All the criteria and sub criteria are then weighed, compared and evaluated to determine what effect it would have on the involved stakeholders. The result is the output of the information which is given in the model on the basis of the present scenario of illegal immigration from Bangladesh to India. It reveals the best alternatives output keeping in mind the benefit, opportunities, cost and risk of this issue. To formulate any policy regarding this issue, it can be helpful to the government in taking the decision through best alternative output of the model. In future if the importance of the factors does change then output of the model will also be changed and suitable in dealing the contemporary situation.

1. INTRODUCTION:

The migration from Bangladesh to India is among the top 20 migration corridors in the World and at the 3rd position in the Asian sub-region (World Migration Report, 2020). Migration within the South Asian sub-region is a dominant feature, driven by economic and labor market differentials. Intraregional movement, both regular and irregular, is related to strong common historical roots, geographic proximity, and cultural and kinship ties between countries (Srivatava, 2017). According to Indian census 2011, there is more than 30 Million Population in India whose last residence was in Bangladesh. They may be legal, illegal, or refugee. While the exact number of people coming from Bangladesh is unknown, there are millions of Bangladeshi labor migrants currently working in India especially in the informal sector as construction laborers, domestic workers, etc. India is home to a significant number of irregular migrants from Bangladesh (Jayasuriya and Sunam, 2016). Handling such large numbers of immigrants is challenging for a developing country like India. This study gives an outline management policy for Bangladeshi migrants in India using Analytical network Process.

There is no concrete policy regarding illegal immigrants coming from Bangladesh to India. The Citizenship amendment Act, 2019 grants citizenship to illegal immigrants from selected countries, including Bangladesh, on the basis of their religion within a specific cutoff date but the issue of other illegal immigrants coming from Bangladesh was not addressed. Therefore, to tackle this, the policy should be treated in a comprehensive manner. Western countries, which faces similar problem, build a legal framework to control the number of illegal immigrants based on some policy tools like, enforcement of stricter border controls to prevent the entry of unauthorized migrants, expulsion and deportation of undocumented immigrants, granting undocumented migrants' a legal status, financial and technical assistance for the development of the origin country, work permit for specific periods, etc. (Casarico et al, 2015; Tripathi, 2016)

This section analyzes the alternatives that may be better to tackle this illegal migration, in the light of BOCR (Benefit, Opportunities, Cost and Risk) criteria through Analytical Network Process (ANP) in Super Decision Software. A large number of economic, social, political, and environmental factors are taken into consideration, focusing on the present situation of India and Bangladesh. Priorities are given carefully through discussion with experts about present scenario. This study suggests that "Make current all illegal immigrant Indian citizen and increasing border security force" is the best decision for the present situation. Whereas: "A complete open border between India and Bangladesh" and "Deport all illegal immigrants and increase the border security force" is the most costly and risky decision at present.

2. ALTERNATIVES:

Taking into account the enormity and complexity of the issue, management of the immigrants from Bangladesh is quite complex. Based on existing literature, the following alternatives are taken into consideration:

- 1. Do nothing:** This alternative states that there should be no change in the present situation of immigration from Bangladesh to India. It means no additional policies taken by the government regarding Border security, Citizenship, or any other which are related to Migration from Bangladesh.
- 2. Deport all illegal immigrants and increase the border security force:** This implies that the Indian government shall identify all illegal immigrants and deport them to their

origin country that is Bangladesh and after this increase border security force which may mostly stop the illegal immigration. This alternative requires huge manpower, is expensive, and has no bias of religion.

3. **Make all current illegal immigrants Indian citizens and increase border security force:** This alternative gives opportunities to all illegal immigrants to obtain citizenship up to a stipulated time without any condition. It is not implemented on the basis of religion. After that the border security should be increased which will prohibit further illegal immigration.
4. **Make all refugees Indian citizen and deport other illegal immigrants:** This alternative gives opportunities to all refugees coming from Bangladesh to obtain Indian citizenship. After this, the border security is increased. This procedure depends on religion.
5. **Guest worker program:** This alternative allows illegal immigrants to reside in India with an appropriate and valid proof of employment and these must be maintained in a register for employees. In this approach, the government makes clear policies for these types of guest workers program.
6. **Help Bangladesh’s economy and increase bilateral relation:** This alternative states that the government of India contributes to the development of Bangladesh, strengthens their economy, and suggests protecting their minority. With this support, less Bangladeshis will migrate to India.
7. **A complete open border between India and Bangladesh:** This alternative posits that the people of India and Bangladesh can move freely across the border and can live and work in both countries.

3. CONTROL CRITERIA:

The issue of illegal migration is analyzed on the basis of four (4) criteria, that is Economic, Social, Political, and Environmental. The above criteria are further divided into different sub criteria and organized according to their Benefit, Opportunities, Cost, and Risk (BOCR). The perspective and approach of the sub criteria is described from tables 1 to 4.

Table 1: Explanation of Benefit Control Criteria

Criteria	Sub Criteria	Description
Economic	1. Cheap labor	Illegal immigrants usually work “under the table” for less than the minimum wage, which helps keep labor costs low for Indian businesses.
	2. Lower production cost	Because of the low labor costs explained above, Indian businesses are able to keep prices low for consumers.
	3. Economic Growth	Growth of Indian economy in all aspects
	4. Increase jobs for Indians and Bangladeshi	One probable result from the alternative “Help the Bangladesh Economy” would be that Bangladesh would have higher employment rates and consequently fewer Bangladeshis would emigrate to the India and take Indian jobs.
	5. Increase export business for India	‘Make current illegal immigrant ‘, ‘Guest worker program’ may increase export business for India.

	6. Increase tax revenue	For the most part, illegal immigrants do not pay taxes properly, so in the case of the alternatives “Make Current Illegal Immigrants Indian Citizens...” and “Guest Worker Program”, the tax revenue would increase as a result of previously illegal immigrants becoming legal and paying taxes.
	7. Keep jobs for Indian	If “Deport all illegal immigrant...” is the alternative, then the jobs remain for Indians.
Social	8. Diverse population	The population is diversified (Illegal, Legal, and Native)
	9. Population Growth	Illegal and Legal immigrants added the population.
	10. Improvement of social network	It means the alternatives like “Do nothing”, ‘Complete open border’ or ‘Guest worker program’ improve the social network.
	11. Good relations with neighbors in India	Alternative like ‘Complete open border’, ‘Make all immigrants Indian citizens’ create good relations among natives and immigrants.
Political	12. Maintain good relations with Bangladesh	Some alternative like ‘Help Bangladesh economy...’ ‘Guest worker program’ increase the bilateral relations between Bangladesh and India.

Table 2: Explanation of Opportunities control criteria

Criteria	Sub Criteria	Description
Economic	1. Increase business for Indian	Both legal and illegal immigrants increase business for Indians
	2. Increase business for Bangladesh	Alternative like “Help Bangladesh Economy...”, “Guest worker program” can increase the business for Bangladesh.
	3. Increase Trade	Certain alternatives such as “Completely Open Border. . .” would provide the opportunity for increased trade
Social	4. Reduce drain on social services	At present, illegal and legal immigrants use all types of social services in India and if they are deported, a huge stress on social services can be reduced.
	5. Reduce crime	This refers to both crimes against illegal immigrants who are often targeted because they often do not report crimes to the authorities in fear of being deported, and also to the untracked criminals from Bangladesh that enter the India illegally
	6. Reduce smuggling of immigrant	This refers to the practice of secretly transporting illegal immigrants across the border
	7. Reduce trafficking	Those alternative related to increased border security can reduce trafficking
	8. Reduce disease	Those alternatives related to increased border security

		can reduce diseases through better tracking of immigrants.
Political	9. Better tracking of immigrant	Certain alternatives such as “Make Current Illegal Immigrants Indian Citizens. . .” or “Guest Worker Program” would provide a more accurate count of the number of immigrants in India.
	10. Increase political goodwill	Policies like “Make Current Illegal Immigrants Indian Citizens” or “Make all refugees Indian Citizens” can increase the goodwill for the rest of the world.
	11. Internal party politics in India	Certain alternatives “Make all refugees Indian Citizens” or “Do nothing” gives the advantages to different political parties through their election campaign.

Table 3: Explanation of Cost Control Criteria

Criteria	Sub Criteria	Description
Economic	1. Loss of Indian job	This refer to the Indian jobs taken by the immigrants of Bangladesh
	2. Loss of Inexpensive labor	The alternatives which speak about the deportation of immigrants, will result in the inexpensive labor being removed from India
	3. Effects on border town	Any of the alternatives that include increased border security would hurt the economies of the border town communities, for reasons including displacing businesses in order to make room for additional security measures, and creating an uncomfortable environment which could dissuade consumers
	4. Cost to protect border	This is related to the monetary expenses for increasing the border security force
	5. Loss of money to other Indian program	Monetary requirements for deportation, different policy implementations, or new policies, etc.
	6. Loss of tax revenue	This refers to situations including: If the current illegal immigrants are deported, then India loses the sales tax generated by their patronage of Indian businesses, if illegal immigrants remain, India loses the tax money, and if the immigrants are made legal, the tax will be obtained.
Social	7. Drain on social services	At present, immigrants from Bangladesh receive all social services in India as the natives, which add an extra burden for hospitals, schools, and other sectors.
	8. Crime	This refers to the crimes against and by immigrants.
	9. Human rights violation	This refers to certain alternatives like ‘Deport all illegal immigrants...’ that can violate the human rights, because refugees are involved.
Political	10. National stability	This refers to any situation which can create national stability or instability regarding deportation or

11. Unfavorable worldview This refers to any situation where feedback from the other country is negative.

Table 4: Explanation of Risk Control Criteria

Criteria	Sub Criteria	Description
Economic	1. Outsourcing Indian jobs	This refers to any situation where Indian jobs are taken by the Bangladeshi people
	2. Less Economic growth	Any situation where economic growth goes down and the GPD decreases.
Social	3. Social disturbance	This is the situation where riots, protests, looting increases.
	4. Moral Issue	Certain alternative like “Make all refugees Indian Citizen...” discriminate between immigrants and their families.
	5. Bring diseases	This is related to the diseases that are transmitted by the immigrant.
	6. Religious unrest	Any situation which creates religious unrest in both counties.
	7. Population Shift	A large section of population shifts to India which is a burden for the country.
	8. Increased drug trafficking	Certain alternatives like “open border...”, “Do nothing” increase drug trafficking across the border.
	9. Affecting human migration	Any situation which can intervene human migration.
Political	10. Increased terrorism	The situation where India faces terrorist attacks or the operation or preparation ground of terrorism.
	11. Corruption	This refers to any situation that creates corruption at the administrative or political level from grass root to upper level.
	12. Meddling in Bangladesh’s affairs	Attempts by India to “help” the Bangladeshi Economy could be construed as interfering in Bangladesh’s affairs.
Environmental	13. Drain on environmental resource	This refers to any situation which would substantially increase the consumption of environmental resources, including, but not limited to, an increase in population density
	14. Pollution effect	This refers to any situation which would facilitate an increase in pollution, including, but not limited to, a change in population density
	15. Destruction of the environment	This refers to any situation where immigrants hamper the environment.

4. STAKEHOLDERS:

In the present context, the following stakeholders are involved and affected directly or indirectly due to the immigration from Bangladesh to India.

- a. **Indian Citizen:** All Native citizens of India and all legal immigrants who acquire the citizenship via the Indian Citizenship Act (1955).
- b. **Illegal Immigrant:** All illegal immigrants who reside in India illegally.
- c. **Indian Government:** The current Indian Government
- d. **Bangladesh Government:** The current Bangladesh Government
- e. **Indian Business:** All types of business which are affected by legal and illegal immigrants.
- f. **Indian Political Parties:** Major Political parties which control the Central and State governments, currently and previously.
- g. **Different Religious Groups:** Major religious groups in India and among the immigrants coming from Bangladesh are Hindus and Muslims, respectively.
- h. **Military/BSF:** Indian Border Security Force and Border Management System.
- i. **Social Services:** All institutions which provide services for public like hospitals, schools, etc.
- j. **Border-State Government:** The governments of states adjacent to the Indian border.

5. METHOD OF THE MODEL:

In this study, the priorities of our strategic criteria and sub criteria are given first. Then each of the criteria and sub criteria is compared to each other using the Pairwise Comparison method. Through Pairwise Comparison method, we evaluate each criteria and sub criteria in comparison to each other using a ten point scale to see relative importance. Figs 1-4 illustrates the results of the priorities of the criteria and sub criteria under each of the control criteria, that is, Benefits, Opportunities, Costs, and Risks categories (BOCRs). After that, the data is normalized by each of the criteria clusters. For example, the control criterion “Benefits” was subdivided into Economic, Social, and Political benefits. After these three criteria were compared pairwise, Economic, Social, and Political Benefits obtained 48%, 41%, and 11% priorities respectively. All of the sub criteria under these three general criteria also received priorities resulting from the pairwise comparisons. These priorities are given in Figs. 1–4. After the priorities were obtained, the sub criteria important enough to receive their own subnets were determined.

To determine the sub criteria that receive a subnet, we took each of the priorities shown in Figs. 1–4, and multiplied them by the priority of their “parent criteria”, that is, Economic, Social, Political, and Environmental under all the control criteria (BOCR). The result was a weighted priority that reflected each sub criterion’s importance with regards to the whole control criteria. Then the selected sub criteria that had obtained the highest priorities. Accordingly, we continued to select sub criteria until their added values reached at least 70% of the value of the parent criteria. For example, the Economic Benefits criteria had a priority of 0.48442 in the Benefits category. One of the sub criteria of Economic Benefits is Economic Growth, which received a priority of 0.37566. In order to obtain the weighted priority referred to above, the original Economic Growth priority of 0.37566 is multiplied by 0.48442 (the priority of Economic Benefits) and the result (0.18198) is the relative priority for the sub criteria Economic Growth. After this is done for all of the sub criteria, the highest ranked sub criteria (up to 70% of the relative priority of the control criteria that is BOCR) received a subnet. This process was

repeated for all of the criteria and sub criteria under the four categories: Benefits, Opportunities, Costs, and Risks. Tables 4-8 show the relative priorities of the sub criteria which received subnets (shown in bold).

A subnet is the base level of evaluation where the alternatives are evaluated based on the influence that they have on the stakeholders in light of the sub criteria for which they receive a subnet. For example, the sub criteria “Loss of Indian Job” under cost control criteria received a subnet based on the relative importance. So, under this subnet, each alternative (i.e. alternatives 1 to 7) was pairwise compared with the suitable stakeholders (i.e. stakeholders 1 to 10) with respect to how Loss of Indian Job was affected. A similar comparison was followed for all the sub criteria which received a subnet.

et under Benefit: Priorities

Here are the priorities.

Name	Normalized by Cluster	Limiting
Economic Growth	0.37566	0.090989
Increase Bangladesh and India jobs	0.11986	0.029032
Increase export business for India	0.03620	0.008768
Increase tax revenue	0.10825	0.025735
Inexpensive labour	0.02398	0.005809
Keep jobs for Indian	0.28040	0.067930
Lower production cost	0.05759	0.013948
Economic Benefit	0.48442	0.268458
Political Benefit	0.10836	0.080053
Social Benefit	0.40721	0.225670
Maintain good relation with Bangladesh	0.00000	0.000000
Diverse population	0.12244	0.034929
Good relation with neighbors in India	0.58325	0.118753
Improvement of social network	0.06073	0.012389
Population Growth	0.23357	0.047556

Figure 1: Priorities of Benefit Control Criteria

et under Opportunities: Priorities

Here are the priorities.

Name	Normalized by Cluster	Limiting
Economic Opportunities	0.15424	0.077121
Social Opportunities	0.44738	0.223650
Political Opportunities	0.39846	0.199229
Increase business for Indian	0.73508	0.056690
Increase business for Bangladesh	0.20088	0.015482
Increase Trade	0.05404	0.004939
Reduce drain on social services	0.56290	0.125894
Reduce crime	0.12991	0.028920
Reduce smuggling of immigrant	0.21243	0.047510
Reduce trafficking	0.06373	0.014254
Reduce disease	0.03163	0.007073
Better tracking of immigrant	0.20613	0.041071
Increase political goodwill	0.07050	0.014046
Internal party politics in India	0.72335	0.144111

Figure 2: Priorities of Opportunities

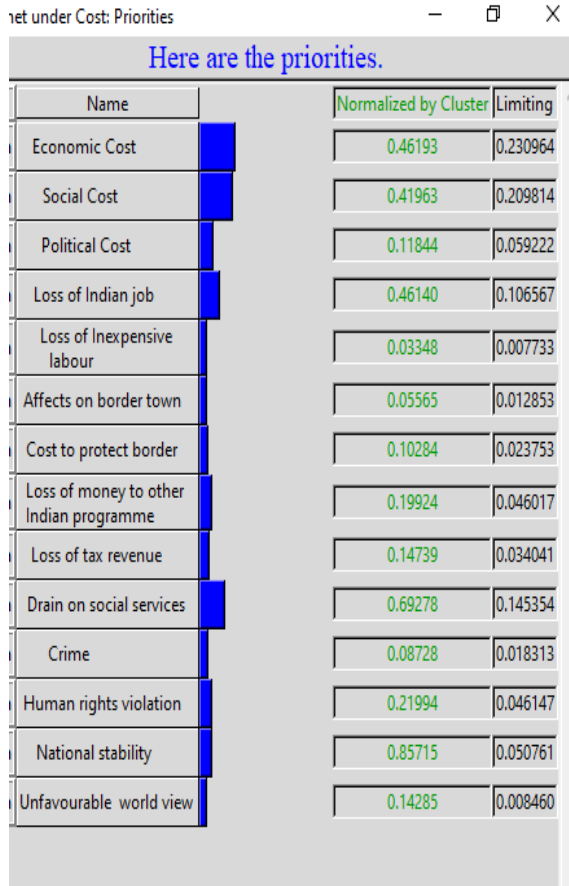


Fig 3: Priorities of Cost Control

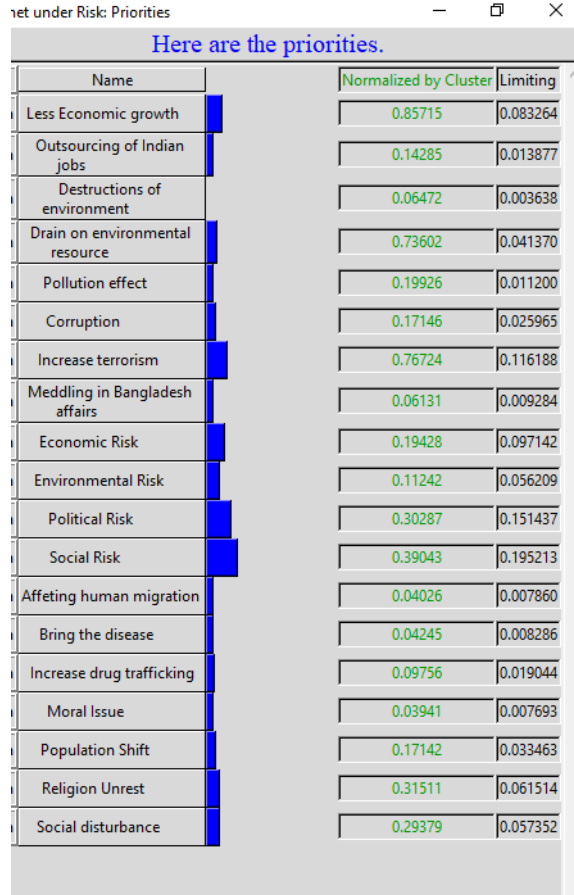


Fig 4: Priorities of Risk Control Criteria

Table 5: Benefit Control Criteria and Sub Criteria Relative Priority

Criteria	Sub Criteria	Normalized by Cluster	Relative Priority
Economic	Economic Growth	0.37566	0.18198
	Increased Bangladeshi and Indian jobs	0.11986	0.05806
	Increased export business for India	0.03620	0.01754
	Increased tax revenue	0.10625	0.05147
	Inexpensive labor	0.02398	0.01162
	Keep jobs for Indians	0.28046	0.13586
	Lower production cost	0.05759	0.02790
Social	Diverse population	0.12244	0.04986
	Good relations with neighbors in India	0.58325	0.23751
	Improvement of social network	0.06075	0.02474
Political	Population Growth	0.23357	0.09511
	Maintain good relations with Bangladesh	0.00000	0.00000

Table 6: Opportunities Control Criteria and Sub Criteria Relative Priority

Criteria	Sub Criteria	Normalized by Cluster	Relative Priority
Economic	Increased business for India	0.73508	0.11338
	Increased business for Bangladesh	0.20088	0.03098
	Increased Trade	0.06404	0.00988
Social	Reduced drain on social services	0.56290	0.25179
	Reduced crime	0.12931	0.05784
	Reduced smuggling of immigrant	0.21243	0.09502
	Reduced trafficking	0.06373	0.02851
Political	Reduced disease	0.03163	0.01415
	Better tracking of immigrants	0.20615	0.08214
	Increased political goodwill	0.07050	0.02809
	Internal party politics in India	0.72335	0.28823

Table 7: Cost Control Criteria and Sub Criteria Relative Priority

Criteria	Sub Criteria	Normalized by Cluster	Relative Priority
Economic	Loss of Indian jobs	0.46140	0.21313
	Loss of Inexpensive labor	0.03348	0.01547
	Effects on border town	0.05565	0.02571
	Cost to protect border	0.10284	0.04750
	Loss of money to other Indian program	0.19924	0.09203
	Loss of tax revenue	0.14739	0.06808
Social	Drain on social services	0.69278	0.29071
	Crime	0.08728	0.03663
Political	Human rights violation	0.21994	0.09229
	National instability	0.85715	0.10152
	Unfavorable worldview	0.14285	0.01692

Table 8; Risk Control Criteria and Sub Criteria Relative Priority

Criteria	Sub Criteria	Normalized By Cluster	Relative Priority
Economic	Less Economic growth	0.85715	0.16653
	Outsourcing Indian jobs	0.14285	0.02775
Environmental	Destruction of environment	0.06472	0.00728
	Drain on environmental resource	0.73602	0.08274
	Pollution effect	0.19926	0.02240
Political	Corruption	0.17146	0.05193
	Increased terrorism	0.76724	0.23237
Social	Meddling in Bangladeshi affairs	0.06131	0.01857
	Affecting human migration	0.04026	0.01572
	Bringing diseases	0.04245	0.01657
	Increased drug trafficking	0.09756	0.03809
	Moral Issue	0.03941	0.01539

Population Shift	0.17142	0.06693
Religious Unrest	0.31511	0.12303
Social disturbance	0.29379	0.11470

6. SYNTHESIZED RESULTS:

Once all the subnets were completed according to their relative priority and under these subnets’ pairwise comparisons were completed between Alternatives and Stakeholders, then we organized the priority of all alternatives on the basis of their Benefit, Opportunities, Cost, and Risk.

As shown in Fig-5 under the Benefit Control Criteria “Make all current illegal immigrants Indian citizens and increase border security force” received the highest priority that is 35.6461%, followed by “Help Bangladesh Economy and Increase Bilateral relation” at 22.8976%. According to our model on the basis of priority of alternative, these two alternatives provides the highest amount of benefit but, this does not take into consideration the costs and risks also associated with these alternatives. The alternatives “Make all refugees Indian citizen and deport other illegal immigrant” and “Guest worker program” received 3rd and 4th priority at 13.8077% and 12.8035% respectively.

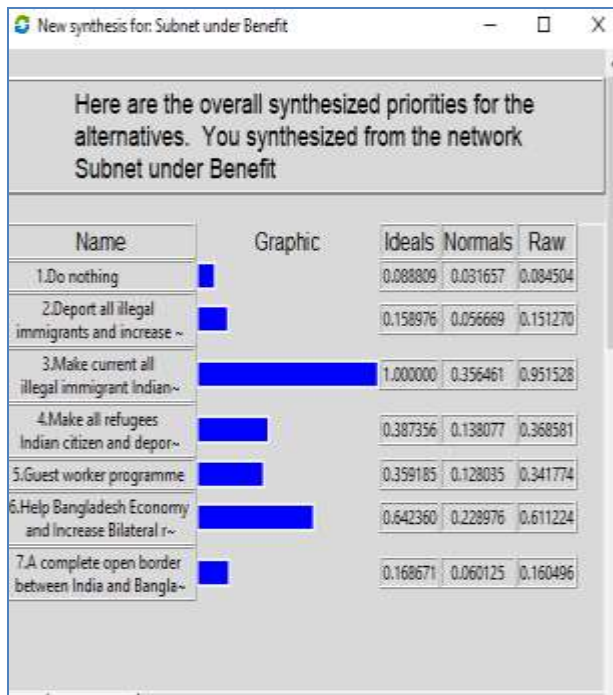


Fig 5: Synthesized priority under Benefit control Criteria

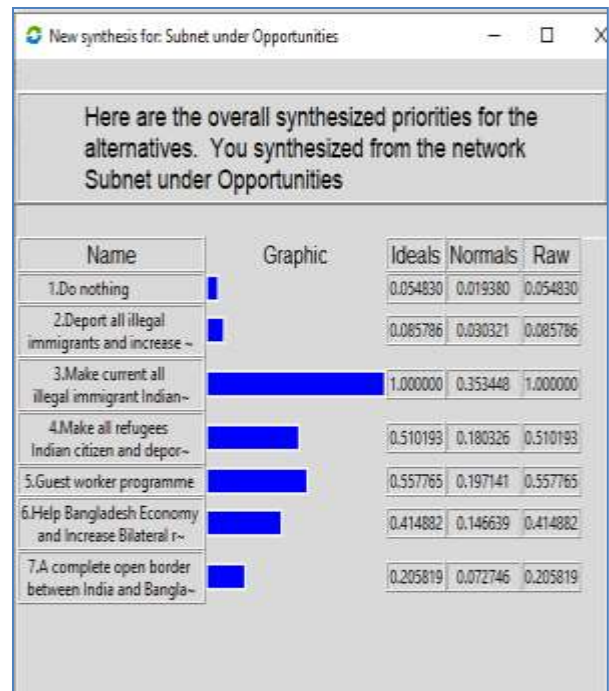


Fig 6: Synthesized priority under Opportunities control Criteria

As shown in Fig- 6 under opportunities control criteria, “Make all current illegal immigrants Indian citizens and increase border security force” received the highest priority at

35.646% followed by “Guest worker program ”at 19.7141%. According to our model on the basis of priority of alternative, these two alternatives provides the highest amount of Opportunities but, does not take into consideration the costs and risks also associated with them. The alternatives “Make all refugees Indian citizens and deport other illegal immigrants” and “Help Bangladesh Economy and Increase Bilateral relations” received 3rd and 4th priorities at 18.0326% and 14.6639% respectively.

As shown in Fig- 7 under Cost control criteria “A Complete open border between India and Bangladesh” received the highest priority at 35.8306% followed by “Deport all illegal immigrants and increase the border security force” at 27.1719%. According to our model on the basis of priority of alternative, these two alternatives are very costly for India. It does not take into consideration the benefit and opportunities also associated with them. The alternatives “Help Bangladesh Economy and Increase Bilateral relations” and “Make all current illegal immigrants Indian citizens and increase border security force” received 3rd and 4th priorities at 11.9404% and 8.2531% respectively.

As shown in Fig- 8 under Risk control criteria “A Complete open border between India and Bangladesh” received the highest priority at 42.8653% followed by “Deport all illegal immigrants and increase the border security force” at 29.1360%. According to our model on the basis of priority of alternative, these two alternatives can create the most risk. It does not take into consideration the benefit and opportunities also associated with them. The alternatives “Make all refugees Indian citizens and deport other illegal immigrants” and “Do nothing” received 3rd and 4th priorities at 11.2753% and 5.5084% respectively.

Fig 7: Synthesized priority under Cost

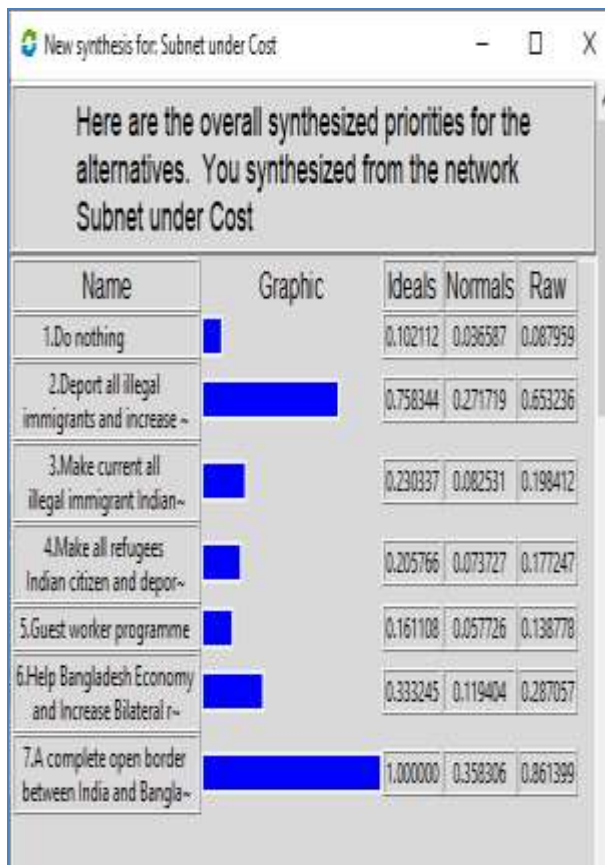
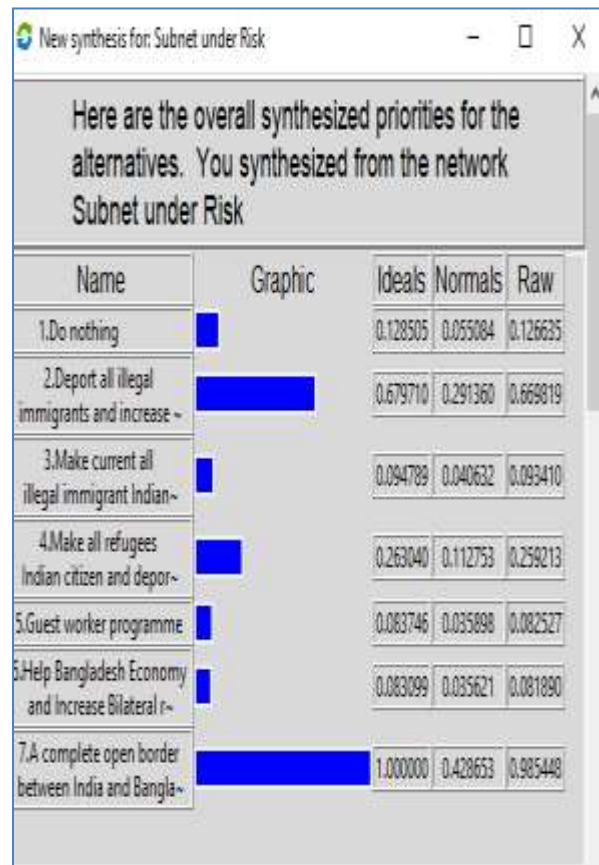


Fig 8: Synthesized priority under Risk



7. OVERALL RESULT:

After the synthesized results of each of the four categories in the BOCR are obtained (as shown in Figs. 5–8), these four sets of data can then be combined to give us our final results. To frame the objective of this model, our results are considered in two specific ways.

MULTIPLICATIVE FORMULA (BOCR)

The Multiplicative Formula combines all the data of four (4) control criteria in a way that produces the best alternative policy practice for India for long-term effects. The results of Multiplicative Formula indicate, based on our synthesized priorities and ratings, that the “Make all current illegal immigrants Indian citizens and increase border security force” is the best alternative with a normalized value of 61.5962. “Guest worker program” has second highest importance with a normalized value of 19.9694. The least important alternatives were “Deport all illegal immigrants and increase the border security force” with a normalized value of 0.0356 and “A complete open border between India and Bangladesh” with a normalized value of 0.0467. The entire outcomes from the Multiplicative formula are in Fig. 9.

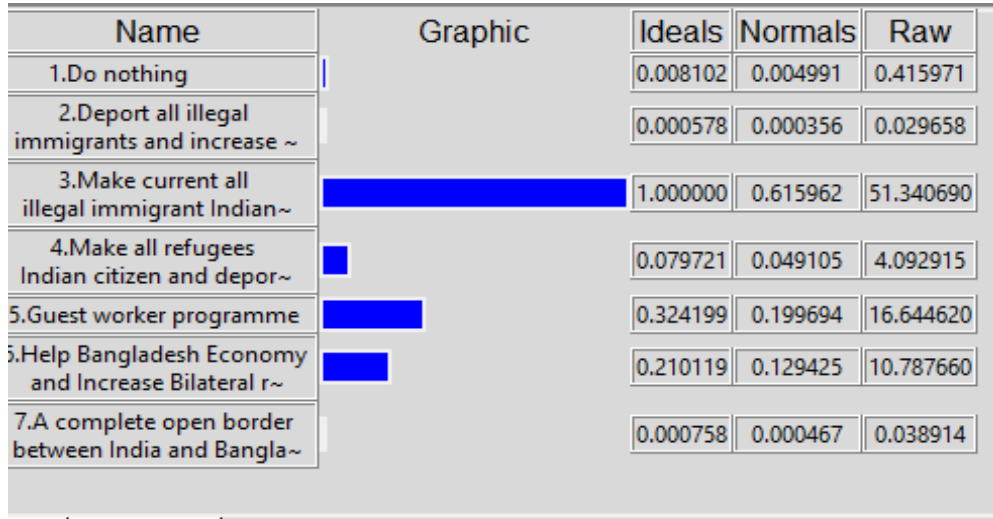


Fig9:Result of Multiplicative Formula

ADDITIVE/NEGATIVE FORMULA (BOCR)

It takes the sum of the prioritized Benefits and Opportunities and subtracts from this total the sum of the prioritized Costs and Risks. This method emphasizes the short-term effects. The outcome of this synthesis is shown in Fig. 10.

The model indicates that the best alternative is “Make all current illegal immigrants Indian citizens and increase border security force” with a normalized value of 27.3014%. The second and third highest priorities among the alternatives were “Guest worker program” and “Help Bangladesh’s Economy and Increase Bilateral relations” with a value of 11.1566% and 10.8100% respectively. These outcomes are different from the Multiplicative Results. The Additive/Negative Formula takes the priorities of the Benefits/Opportunities and offsets them by the Costs/Risks which, as seen here, can result in negative values. The alternatives “A complete open border between India and Bangladesh” (-24.3540%) and “Deport all illegal immigrants and

increase the border security force” (-17.8642%) show these negative results. It is noticed that these were the two alternatives that scored the least in the Multiplicative Formula. This must be because considering the present situation, the costs and risks involved with such alternatives would definitely be more important than any benefits and/or opportunities.

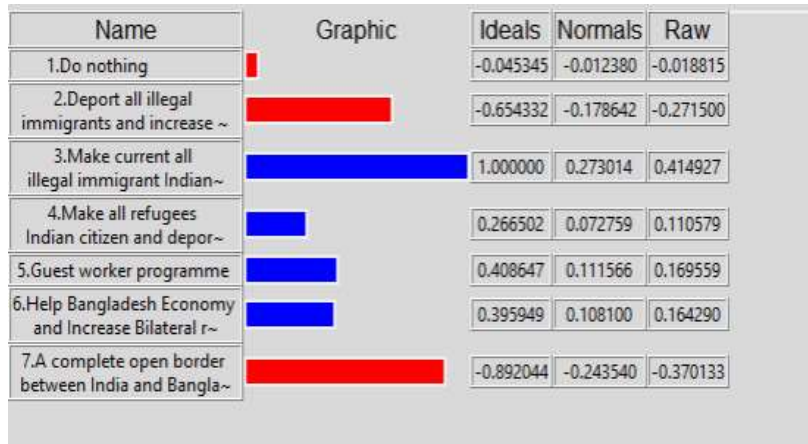


Fig10: Result of Additive/Negative Formula

8. SENSITIVITY ANALYSIS:

In the last section, a Sensitivity Analysis has been done for Benefits, Opportunities, Costs, and Risks to exhibit the flexibility of the model. If the importance of our control criteria, criteria, and sub criteria changes in future that would mean the benefits, opportunities, costs, and risks will change from a low level to a high level and in turn, our result will change. The screens below (Figs. 11–14) show the Sensitivity Charts for the Benefits, Opportunities, Costs, and Risks.

BENEFITS:

Benefit Sensitivity Analysis shows in Fig 11, that the line of the graph which starts from the left, top to bottom are “Make all current illegal immigrants Indian citizens and increase border security force”, “.Guest worker program”, “Help Bangladesh Economy and Increase Bilateral relations”, “Make all refugees Indian citizens and deport other illegal immigrants”, “Do nothing”, “Deport all illegal immigrants and increase the border security force” and “A complete open border between India and Bangladesh”, respectively at 0.5 level of sensitivity. The results of this sensitivity analysis show that the alternative “Make all current illegal immigrants Indian citizens and increase border security force” is preferred until changes has been made at the sensitive level of Benefits. When it changes to 1.0, then “Make all current illegal immigrants Indian citizens and increase border security force” remains unchanged but other alternatives like “Deport all illegal immigrants and increase the border security force” is more preferred than “Do nothing”, This change also explains the differences between the synthesized results obtained by the Multiplicative and Additive/Negative formulas. As our sensitivity changes, our preferred alternatives will also change.

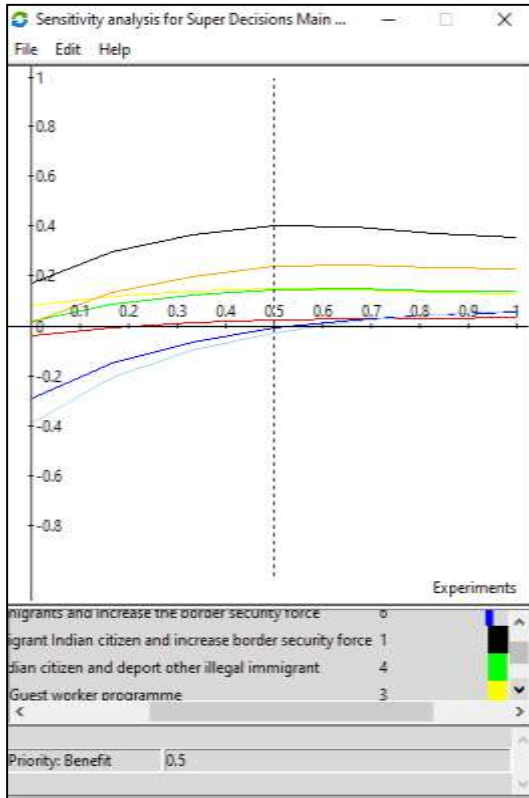


Fig11: Benefit Sensitivity graph

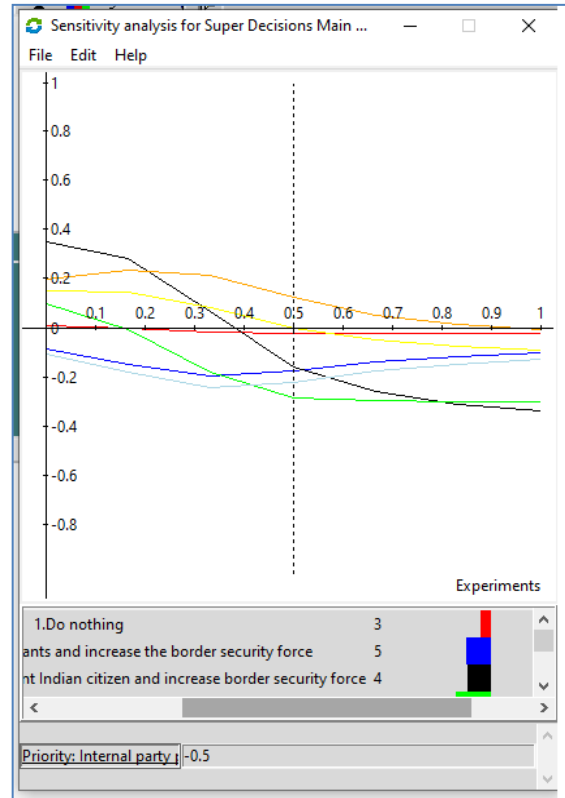


Fig 12: Opportunities (Internal party politics in India) Sensitivity graph

OPPORTUNITIES:

As shown in the Fig 12, the Sensitivity Analysis of sub criteria “Internal party politics in India” under opportunities control criteria starts from the left side of the graph, and the lines from top to bottom are “Make all current illegal immigrants Indian citizens and increase border security force”, “Help Bangladesh’s Economy and Increase Bilateral relations”, “Guest worker program”, “Make all refugees Indian citizens and deport other illegal immigrants”, “Do nothing”, “Deport all illegal immigrants and increase the border security force” and “A complete open border between India and Bangladesh”, respectively at 0.5 level sensitivity. The results of this sensitivity analysis show that the alternative “Make all current illegal immigrants Indian citizens and increase border security force” is best when you reach a sensitivity level between 0 to 0.2 but, when the value is between 0.2 to 1.0 then it goes down and the alternative “Help Bangladesh’s Economy and Increase Bilateral relations” becomes most important. It indicates that when the issue of illegal migration gets more importance and priority in Internal party politics in India then the alternatives like “Guest worker program”, “Help Bangladesh Economy and Increase Bilateral relations”, “Make all refugees Indian citizens and deport other illegal immigrants” is most suitable. Thus, the sensitivity of all the sub criteria combines with the overall sensitivity of opportunities, which reflects on alternatives.

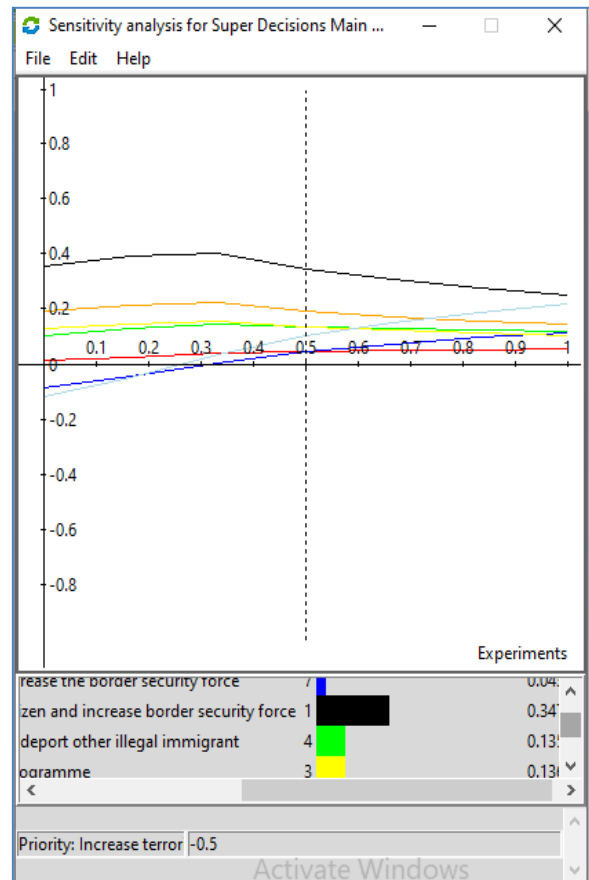
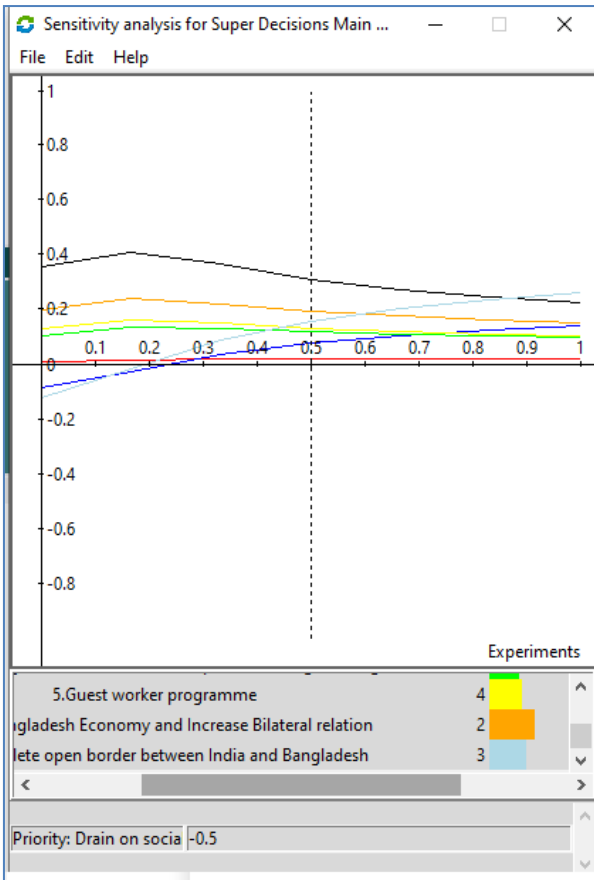


Fig 13: Cost (Drain on social services) Fig 14: Risk (Increase terrorism) Sensitivity graph

COSTS:

As shown in the Fig 13, the Sensitivity Analysis of sub criteria “Drain on social services” under Social Cost control criteria starts on the left side of the graph, and the lines from top to bottom are “Make all current illegal immigrants Indian citizens and increase border security force”, “Help Bangladesh’s Economy and Increase Bilateral relations”, “Guest worker program”, “Make all refugees Indian citizens and deport other illegal immigrants”, “Do nothing”, “Deport all illegal immigrants and increase the border security force”, and “A complete open border between India and Bangladesh”, respectively at a 0.5 sensitivity level. The results of this sensitivity analysis show that the alternative “Make all current illegal immigrants Indian citizens and increase border security force” is best up to 0.8 sensitivity level, but when the value is more than 0.8 then it goes down and the alternative “A complete open border between India and Bangladesh” becomes most important. It indicates that when “Drain on social services” by the illegal migrants gets more importance in India then the alternative “Deport all illegal immigrants and increase the border security force” is most costly. Thus, sensitivity of all the sub criteria combines overall sensitivity of cost, which reflects on the alternatives.

RISKS:

As shown in the Fig 14, the Sensitivity Analysis of sub criteria “Increased terrorism” under Risk control criteria starts on the left side of the graph, and the lines from top to bottom are “Make all current illegal immigrants Indian citizens and increase border security force”, “Help Bangladesh Economy and Increase Bilateral relations”, “Guest worker program”, “Make all refugees Indian citizen and deport other illegal immigrant”, Do nothing” and “Deport all illegal immigrants and increase the border security force” and “A complete open border between India and Bangladesh”, respectively at a 0.5 sensitivity level. The results of this sensitivity shows that the alternative “Make all current illegal immigrants Indian citizen sand increase border security force” is preferable for all sensitivity levels, but it is noticed that when the sensitivity level is towards 1.0, then the alternative “A complete open border between India and Bangladesh” and “Deport all illegal immigrants and increase the border security force” sharply increases. It indicates that when increased terrorism gets more priority then both “A complete open border between India and Bangladesh” and “Deport all illegal immigrants and increase the border security force” alternatives become most risky. Thus the sensitivity of all the sub criteria combines overall sensitivity of cost, which reflects on the alternatives.

9. CONCLUSION AND FUTURE PROSPECTS:

The literature about migration points out the different causes of migration in different places in Bangladesh. In the rural areas of Bangladesh, scarcity of land and water,, rapid population growth, environmental changes, and unequal resource distribution and development are causing widespread landlessness, unemployment, declining wages and income, growing income disparities, and degradation of human habitat. The affected people, unable to satisfy their needs in an economically underdeveloped Bangladesh, are moving to India where the prospect of life appears to be better. In contemporary times, large-scale migration from Bangladesh has become a severe and challenging issue for India.

This study analyzes effects of this migration on our economic, social, political and environmental well-being and the priorities were crafted carefully through discussions with experts about the present situation. Our model indicates that the alternative “Make all current illegal immigrants Indian citizens and increase border security force” is the best alternative with a long term effect at present. This is followed by “Guest worker program” and “Help Bangladesh’s Economy and Increase Bilateral relations”. Also, the alternatives “A complete open border between India and Bangladesh” and “Deport all illegal immigrants and increase the border security force” has shown the greatest risk and cost. The dimension Citizenship (Amendment) Act, 2019 was also included in our study while building alternatives. Any future policies made by the government may include these alternatives and can be evaluated through the contemporary economic, social, political, and environmental criteria and sub criteria.

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