

A Study Of The Impact Of Floods On Alcohol Consumption And Its Subsequent Effect On Domestic Violence: Case Study Of Bihar (India)

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Introduction

Floods are one of the most destructive forms of natural disasters, and their impact on alcohol consumption and its subsequent effect on domestic violence is a cause for concern. In regions where floods have occurred, there is an increase in alcohol consumption as people attempt to cope with the emotional stress associated with the disaster. This increase in alcohol consumption may lead to an increase in domestic violence, as alcohol consumption is associated with an increase in aggression and impulsivity.

Floods are more damaging than other disasters because they can cause more physical destruction and have a greater economic impact. In addition, floods can cause disruption to production, displacement of populations, and long-term health impacts.

Studies have shown that alcohol consumption can increase the risk of physical and sexual violence within the home, as alcohol impairs judgment and increases impulsivity. Furthermore, alcohol consumption can lead to increased financial strain, as individuals may spend money on alcohol that could otherwise be used to purchase necessities such as food and shelter. Studies have shown that the impact of floods on alcohol consumption is generally higher in communities that are more economically disadvantaged.

In order to reduce the impact of floods on alcohol consumption and its subsequent effect on domestic violence, it is important for community members to be aware of the risks associated

with alcohol consumption during times of crisis. Furthermore, it is important for community members to receive adequate emotional support in order to cope with the stress of floods. Communities should also provide individuals with educational resources and awareness campaigns regarding the risks associated with alcohol consumption and domestic violence. Finally, communities should have access to community centers and support groups that can provide individuals with emotional support and resources during times of crisis.

Correlation between Natural Disasters and Alcohol Consumption

Natural disasters can have a profound impact on individuals and communities. In addition to the physical destruction and disruption of daily life, natural disasters can also lead to psychological distress, including depression, anxiety and post-traumatic stress disorder. In some cases, this distress can lead to an increase in alcohol consumption.

Alcohol use can become a way to cope with the psychological distress caused by natural disasters. It can provide temporary relief from the stress and worry associated with the disaster. Alcohol can also provide a distraction from the reality of the situation, allowing people to temporarily forget their worries. However, this relief is often short-lived, and alcohol can lead to other problems, such as increased conflict, violence, and physical health issues.

Research has found that there is a positive correlation between natural disasters and alcohol consumption. Studies have found that after a natural disaster, there is an increase in alcohol use among affected individuals. This increase is especially pronounced among young people, who are more likely to use alcohol as a way to cope with their distress.

The correlation between natural disasters and alcohol consumption is concerning, as it can lead to long-term physical and mental health problems. It is important for those affected by natural disasters to seek professional help to manage their distress and cope with the traumatic event. This can include individual counselling and support groups, as well as medication if necessary.

In conclusion, there is a positive correlation between natural disasters and alcohol consumption. This correlation is especially concerning, as it can lead to long-term physical and mental health problems. It is important for those affected by natural disasters to be aware of the potential risks associated with alcohol use and to seek help if necessary.

Indian Perspective

In India, there is a correlation between floods and alcohol consumption. Studies have found that during and after floods, people tend to consume more alcohol than usual. This is due to the fact that people are trying to cope with the stress and anxiety caused by the floods. Alcohol provides a temporary relief from the distress caused by the floods, and this leads to increased consumption.

Another factor that contributes to the correlation between floods and alcohol consumption is the fact that alcohol is often used as an escape from reality. During floods, people may seek

solace in alcohol in order to forget the pain and suffering caused by the floods. This can lead to increased consumption of alcohol, as people try to forget their worries and anxieties. In conclusion, there is a strong correlation between floods and alcohol consumption in India. People tend to consume more alcohol during and after floods in order to cope with the distress caused by the floods. The increased availability of alcohol can also contribute to increased consumption. It is important for people to be aware of the dangers of excessive alcohol consumption and to seek help if necessary.

2019 Bihar Floods Case Study

Prologue

It is a commonly known fact that a large amount of alcohol is bootlegged from the eastern districts of Uttar Pradesh across the Western border of Bihar. The people of Bihar have been dependent on smuggled liquor from Uttar Pradesh, as alcohol is still available in the latter state.

The bootlegging of alcohol from Uttar Pradesh to Bihar is mostly done through the state’s porous borders with Bihar. Bootleggers from Uttar Pradesh use trucks, vans, and even bicycles to smuggle alcohol across the border. The bootleggers often pay bribes to the police or local authorities to avoid detection. Bootleggers also make use of the numerous rivers, canals, and streams in the region to transport alcohol from Uttar Pradesh to Bihar.

In this study, we have taken a dataset representing the year-wise breakdown of the liquor sales of the 16 eastern-most districts of Uttar Pradesh in 2019-20 and was sourced from the Department of Excise, Uttar Pradesh. The study aims to show the correlation between the severity of floods and alcohol consumption in the state of Bihar.

STATEMENT SHOWING FLOOD DAMAGE DURING 1953 TO 2019										
Year	Area affected in (m.ha)	Population affected in (million)	Damage to Crops		Damage to Houses		Cattle lost nos.	Human live lost nos.	Damage to public utilities in Rs Crore	Total damage crops, houses & public utilities in Rs Crore
			Area (m.ha)	Value (Rs. Crore)	Nos.	Value in (Rs. Crore)				
1953	1	6.3	0.9	29	184300	6	33	5	1.5	36.5
2013	2.36	7.23	0.71	222.80	169501	35.34	6480	253	18.23	276.37
2014	3.90	3.00	0.50	176.4	13662	10.78	34	158	5.40	192.58
2015	0.01	0.49	0	0	518	0.69	1	27	0.03	0.72
2016	4.33	8.79	0.71	519.77	69102	40.03	538	458	116.49	676.29
2017	3.00	18.5	0.30	685.87	263848	778.79	472	815	103.37	1568.03
2018	0.03	0.15	0.00	5.14	1074	0.41	0	1	0.01	5.56
2019	1.06	14.94	0.36	446.64	45161	27.96	183	300	167.5	642.10

Source : bhuvan.nrsc.gov.in Flood-Hazard-Atlas-Bihar

2019 Bihar Flood

The 2019 Bihar floods were a devastating series of floods in the North-Western areas of Bihar.

The floods began in the middle of July 2019, when heavy monsoon rains caused the Ganges, Gandak, and other rivers to overflow their banks. The floods affected 19 districts of Bihar, with an estimated 4.5 million people affected and over 1,000,000 people displaced. The floods caused extensive damage to infrastructure, including roads, bridges, and railway lines. Over 1.2 million hectares (2.9 million acres) of cropland were affected by the floods, leading to significant losses of crops and livestock.

The most affected districts in the state are Sitamarhi, Darbhanga, Sheohar, Muzaffarpur, East Champaran, Gopalganj and West Champaran. In 2019, Bihar experienced its worst flooding in the last 20 years. The floods of 2019 caused an estimated Rs. 12,000 crore in damages and economic losses.

The data

Data representing the year-wise breakdown of the liquor sales of the 16 eastern-most districts of Uttar Pradesh was sourced from the Department of Excise, Uttar Pradesh. The data is from the time period 2014- November 2022 and is divided into Domestic liquor, Foreign Liquor and Beer respectively.

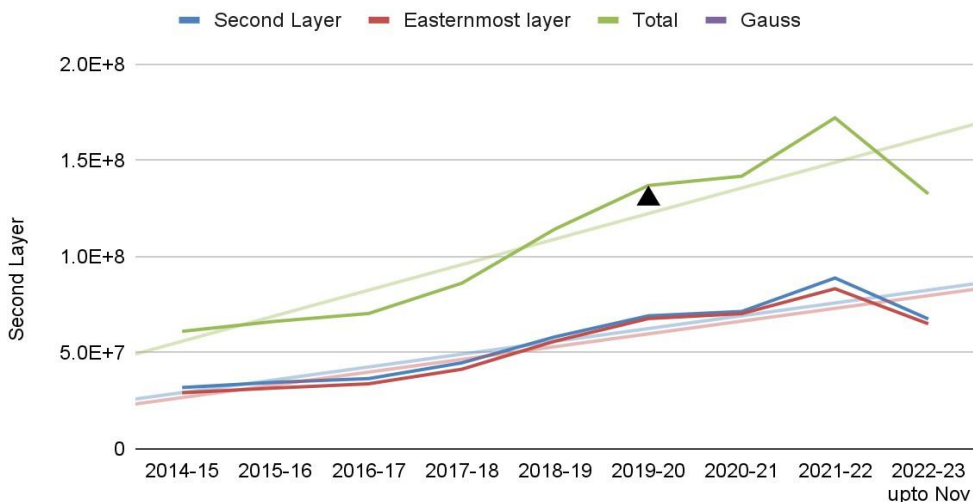
Uttar Pradesh 2019-20 Eastern districts Alcohol Consumption data

Operations

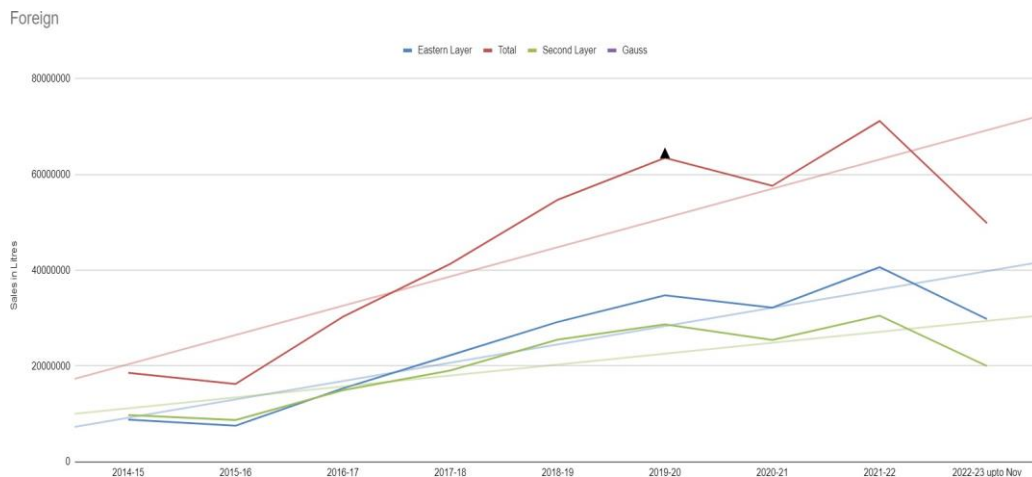
The 16 districts were divided into 2 layers of 8 as the easternmost layer and the second layer. The aggregate of these layers was taken and linear interpolation was used to create a trendline.

Domestic liquor Consumption in Litres

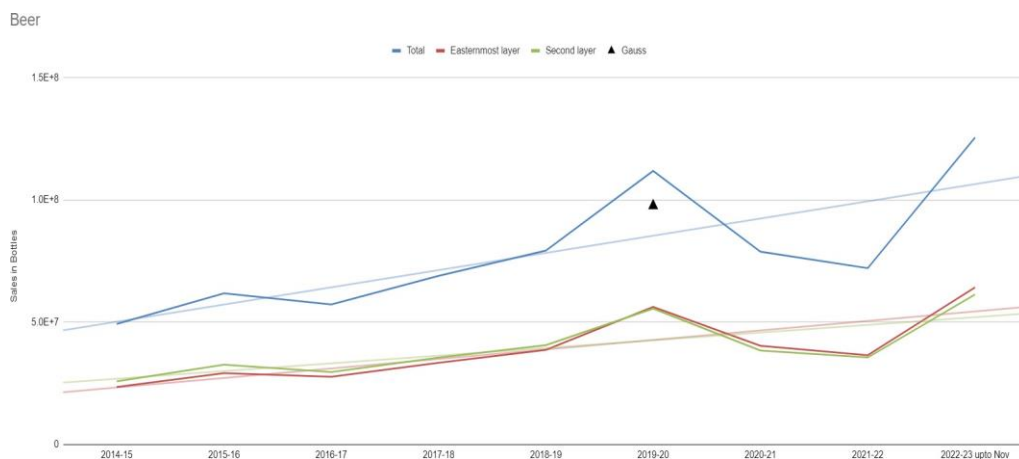
Domestic



Foreign Liquor Consumption in Litres



Beer Consumption in Bottles



Observations

1. The general trend shows that the Actual consumption was greater than the projected consumption in the period of 2019-2020. A consistent deviation of 2-10% between the two can be attributed to the bootlegging from UP to Bihar.
2. In all the cases, the easternmost layer witnesses a greater hike than the second layer signifying a gradient
3. Sales in volume increased by 25.73% for these districts whereas the overall sales for Uttar Pradesh only increased by 12.26% showing relative stagnation in central and western UP sales.
4. The data also shows the massive drop in sales due to the pandemic and a subsequent rise due to the endorsement from the state government in order to generate revenue

5. We can see a representation of the elasticity of Giffen goods and Veblen goods in a disaster-stricken Economy.

Limitations

1. Bihar gets flooded every year
2. Parts of Eastern UP were also affected by the floods
3. There are several other factors affected the sale of liquor
4. Most of the distilleries and breweries do not represent the correct sales statistics in order to evade tax and sell unlicensed or contraband liquor under the table
5. Several liquor stalls have maliciously ignorant book-keeping due to the above reasons
6. Moon shining is a traditional practice in many households
7. Industrial Alcohol is often consumed by flood victims who cannot afford liquor
8. Eastern UP distilleries are also a source of alcohol for Nepal, Madhya Pradesh and Jharkhand.
9. A 2% difference between Actual and Projected consumption in some states is not sufficient to show correlation.

Correlation between Alcohol Consumption and Domestic Violence

Alcohol consumption has been linked to a number of cognitive and behavioral changes in individuals, including impulsivity and aggression. When these traits are combined with the already high levels of stress and frustration that exist in many Indian households, it is not difficult to see how alcohol consumption can lead to violent outbursts. The presence of alcohol in the home can create a dangerous environment where violence can easily occur.

In addition to the physical and psychological effects of alcohol consumption, it can also lead to financial problems. Alcohol consumption often leads to spending large amounts of money on alcoholic beverages, which can lead to financial strain and even poverty in households. This financial strain can further contribute to domestic violence as family members become increasingly frustrated with each other.

Finally, alcohol consumption is often seen as a way for individuals to cope with their problems. This coping strategy can be dangerous, as it can lead to further alcohol consumption, which in turn can exacerbate the risk of domestic violence.

Domestic Violence in India

Domestic violence in India is a multi-faceted problem, and there are a variety of reasons that it continues to be a problem. One of the primary causes of domestic violence in India is the lack of education and awareness about the issue. Many people in India are not aware of the rights that they have under the law, and this leads to a situation where victims of domestic violence are unable to come forward and seek help. Another cause of domestic violence in India is the low status of women in Indian society. Women are often seen as inferior to men, and this leads to the perpetuation of domestic violence in the home.

The consequences of domestic violence in India can be extremely severe and long-lasting. Victims of domestic violence often suffer from physical and psychological trauma, and can even experience long-term health problems.

The government of India has taken some steps to combat domestic violence in the country, including passing laws to protect victims and punishing perpetrators of domestic violence. Non-governmental organizations are also playing an important role in raising awareness about the issue and advocating for better protection for victims of domestic violence.

Domestic Violence in Bihar

In Bihar, domestic violence takes many forms including physical, verbal, emotional, sexual and financial abuse. The prevalence of domestic violence in Bihar is alarming. According to the National Crime Records Bureau (NCRB) data, Bihar has reported the highest number of cases of domestic violence in the country in the last five years. The root causes of domestic violence in Bihar are complex and include poverty, illiteracy, gender inequality, lack of access to legal assistance, inadequate law enforcement and a patriarchal society. Women in Bihar are particularly vulnerable to domestic violence due to the gender inequality that still exists in the state.

National Family Health Survey - 5 Report

The National Family Health Survey 5 (NFHS-5) is the fifth round of a large-scale, nationally representative survey conducted in India by the Ministry of Health and Family Welfare with support from the International Institute for Population Sciences and other partners. The survey collects information on a range of demographic, health, and nutrition indicators related to women, men, and children in India.

The NFHS-5 was conducted between 2019 and 2020 and covered all 28 states and 8 Union Territories of India. It collected information from over 6 lakh households, making it one of the largest surveys of its kind in the world.

The NFHS-5 provides a comprehensive picture of the health and well-being of people in India and helps to identify trends and patterns in health and nutrition indicators over time.

NFHS-5 Bihar State report

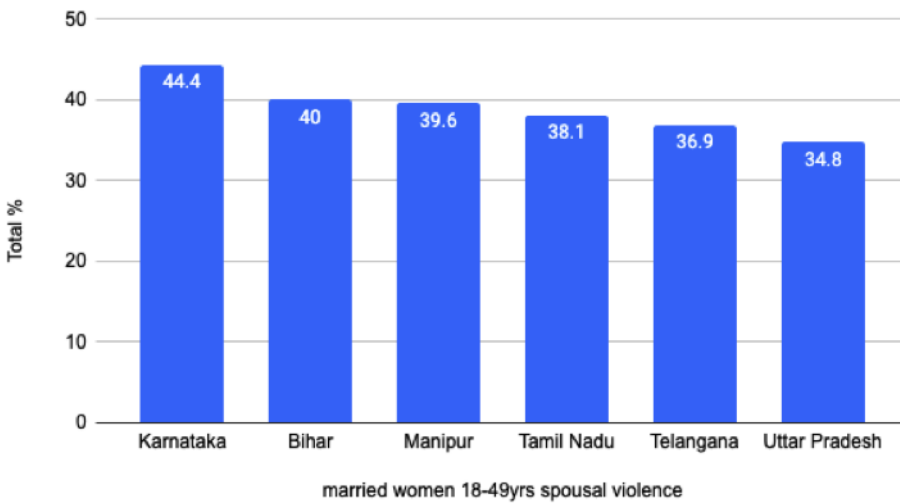
According to the NFHS-5 Bihar State report, a significant proportion of ever-married women between the ages of 18 and 49 have reported experiencing various forms of violence at the hands of their husbands. Specifically, 39% of women have experienced physical violence, 8% have experienced sexual violence, and 17% have experienced emotional violence. Many women have reported specific acts of violence, such as being slapped (36%), pushed or shaken (15%), punched (13%), kicked or beaten (9%), or even threatened with a weapon (1%). Additionally, 6% of women have reported being forced to have sex against their will, and 4% have reported being forced to perform sexual acts they did not want to do. Overall, 40% of ever-married women in Bihar have experienced spousal physical or sexual violence from their current or most recent husband. While spousal violence is generally lower among more educated women.

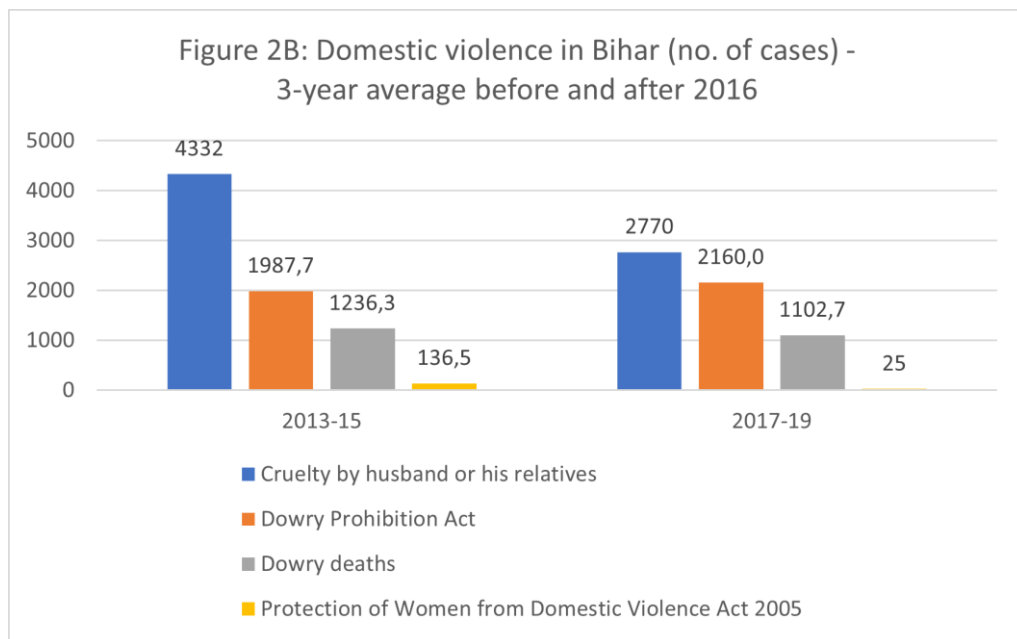
The intergenerational aspects of spousal violence are clear, as women whose mothers were also victims of domestic abuse are more likely to experience it themselves. Many women who have experienced physical or sexual violence from their husbands have also suffered injuries

as a result. The most common types of injuries include cuts, bruises, aches, and wounds, but some women have also experienced broken bones or teeth, severe burns, and other serious injuries.

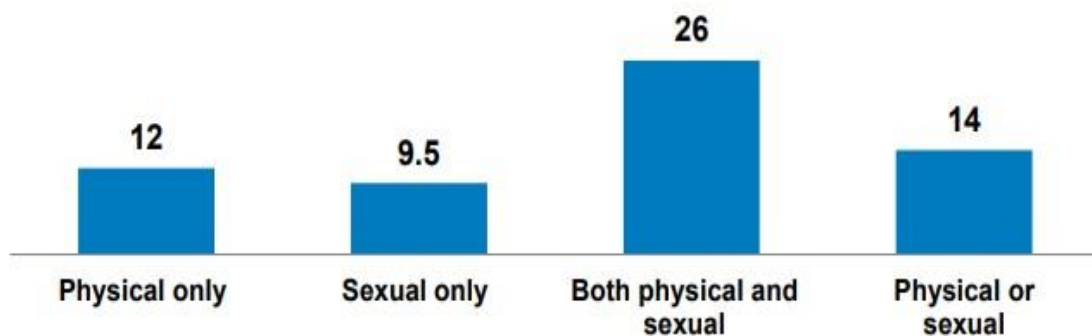
These findings highlight the prevalence and seriousness of spousal violence in Bihar, and the need for efforts to address and prevent it. It is important to raise awareness about the issue, provide support for victims, and work to change attitudes and behaviors that perpetuate violence in intimate relationships.

States with highest cases of domestic violence





Percentage of women age 18-49 who have experienced physical or sexual violence who sought help



In Bihar, out of women aged 18-49 who experienced physical or sexual violence, only 11% sought help, while 7% confided in someone without seeking help. A majority of 82% never sought help or told anyone about their experience. For those who sought help, their husband's family (45%) and their own family (40%) were the main sources, followed by friends (11%) and neighbors (9%). Only 3% sought help from a doctor or medical personnel, and 2% from the police.

Recent Developments

Recent Developments on Alcoholism

1. The Bihar government has issued a complete ban on the sale, purchase and consumption of alcohol in the state.
2. The state government has also banned the manufacture of alcohol and has levied heavy fines and punishments for those who violate the ban.
3. The state government has launched a number of awareness campaigns to educate people about the dangers of alcoholism.
4. The government has also set up de-addiction centres in various parts of Bihar to provide treatment to those who are addicted to alcohol.
5. The government has also started a helpline to provide counselling and other support to those who are trying to quit alcohol.
6. The government has also launched a mobile app to help alcoholics find nearby de-addiction centres and put in place a rehabilitation programme for those who have been addicted to alcohol.
7. Moonshining in Bihar thrives due to the state's strict alcohol prohibition policy. This ban led to the proliferation of clandestine operations producing illicit alcohol, known as "desi" liquor, often run by criminal networks. Moonshiners set up makeshift distilleries in hidden locations to evade law enforcement, using locally available grains like rice or millet.

Recent Developments on Domestic Violence

1. The Bihar government has enacted the Bihar Domestic Violence (Prevention and Protection) Act, 2007, to provide protection to victims of domestic violence.
2. The government has also set up special cells in every district to receive complaints of domestic violence and take appropriate action.
3. The state government has also launched a helpline for victims of domestic violence, providing legal, medical, and psychological counselling.
4. The Bihar State Legal Services Authority has established special fast-track courts to expedite cases related to domestic violence.
5. The government has also set up special rehabilitation centres for victims of domestic violence, providing them with medical, psychological, and legal aid.
6. The government has also conducted awareness campaigns to educate people about the ill-effects of domestic violence and the legal provisions available to protect victims.

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