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- ❖ **Russia-US Relations**
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# Curbing Maoist Violence

**B**rutal killing of 26 police personnel of the Central Reserve Police Force (CRPF) on 24 April by the militants of the banned Communist Party of India (Maoist) in an ambush in Sukma district, apart from sending shock waves throughout the nation, also raises many questions about capabilities of the central government as well as states of the Red Corridor in dealing with mounting Maoist menace. Media reports indicate that this was the worst attack on security forces in the region since the April 2010 attack when Maoists killed 74 men of the CRPF in the nearby Dantewada district. Recurring incidents of Maoist violence give rise to serious concerns about the ground situation in the tribal belts of Red Corridor states, where central forces along with the state police personnel are engaged in a nearly two-decade-old conflict with Maoists. Time has come to adhere to stern measures instead of replicating the ritual comprising—condemnation of the attack, pay homage to those killed in battle, look into what went wrong and propose solutions for the same. The Red Corridor is most affected by Maoist violence lie in a wide swath of mineral-rich, forested tribal lands, from Maharashtra to West Bengal, where the Maoist outfits cause the most terror deaths in India. Development projects along with infrastructure expansion in these mineral-rich areas have resulted in the displacement of about 21 million native people of which tribal population is about one-third.

Growing resentment amongst the displaced persons, especially tribal population, is reportedly exploited by the Maoists. Government's efforts to make further grounds into the Maoist heartland, opening up villages that have until recently remained cut off from the national mainstream are vehemently thwarted by the Maoists through indulgence in violence. More security personnel have lost their lives in Chhattisgarh (235) than in any other state between 2011 and 2015. With 72 security personnel killed in Maoist-related violence in just four months of 2017, it is already the deadliest year in the past seven years for Indian security forces. The construction of roads and mobile towers by the government in Red Corridor areas is being carried out under heavy security cover on a war footing which is justified as a part of the government's counter-insurgency strategy, allowing security personnel to deploy and control the area quickly. There have been reports about pitched battles between the security personnel and the Maoists, who are hell-bent on delaying the construction of these roads.

In the wake of Maoist attack of April 24 on the CRPF, observers in the know have raised serious questions about the institutional and strategic failures on the Indian State's part that have led to such massacres. These observers opine that the CRPF, which is country's largest counter-insurgency force comprising over three lakh personnel, needs revamping in terms of training and supply of latest combat equipment. While welcoming Union Home Minister's recent assertion that the Centre would rework its strategy to take on the Maoists, considering the absence of a coherent strategy or plan in the first place; security experts have also called out for the modernisation of the central and state police personnel and their greater deployment in the battle against Maoists.

Some security experts point out that a fundamental flaw in the anti-Maoist operations today is that the state police forces in most states are heavily dependent on the Central Government. The mindset seems to be that Maoism is the government of India's problem and, therefore, the Central forces should bear the brunt of extremist violence. It is suggested that there is a need for the Centre to take a look at the counter-insurgency template established by various State governments in the past. Under the leadership of KPS Gill and his effective counter-terror strategy, the Punjab Police managed to wipe out terrorism from the country in the 1980s. In the undivided Andhra Pradesh, the use of a specialised anti-Maoist force called the Greyhounds enlisted from the State police force, took down the Naxal menace in the state. State governments have to lead the line in this battle against militants, and the Centre must confine itself to a supporting role. Leadership, training and equipment are the three areas which need to be reviewed, other than the senior leadership question.

— BK



# Disquiet in Russia-US Relations

Dr. Anilkumar B. Halu\*

Since the advent of Donald Trump's administration in Washington, a pall of disquiet has seemingly descended on the bilateral relationship between Russia and the United States. Undoubtedly, even during the two-term presidency of Barack Obama, Washington's relations with Moscow had been at low key; nevertheless, in the aftermath of Trump administration, bilateral pattern of relationship has registered a new low.

Differing perspectives on Syrian crisis, Moscow's support to Assad regime of Syria and American support to anti-Assad forces, allegations of Russian support to Donald Trump during his presidential election and alleged Russian complicity in hacking some significant American official websites, reported use of chemical weapons by Assad forces against its rivals and recent missile attacks by the US against Syrian forces etc are the factors that have seemingly brought bilateral relations to a nadir.

In the wake of these developments, one analyst has opined: "Recent events that could brew a possible global conflict lead many to fear and speculate that a third world war could erupt, following the rising tension between the United States and Russian Federation over Trump's response to the Syria chemical attacks."

## Past Legacy Haunts

The current crisis in Moscow-Washington relationship is haunted by the past legacy of 'hostile relationship'. Media reports in the last quarter of 2016 indicated that state-controlled electronic media in Moscow had generated a mass hysteria of a Cold War-like threat of a nuclear disaster that seemed eerily possible. A massive

government campaign had stoked fears of a world war started by a U.S. strike.

Russian civil defense drills discernible in September-October 2016 were on a level not seen since the Soviet Union collapsed in 1991, and involved 40 million people. In Moscow, officials reportedly studied underground spaces as part of a plan to shelter the city's estimated 12 million people.

In addition, world events occurring in 2016 had illustrated divisions between Russia and the U.S. Both countries disagreed on their involvement in the Syrian civil war and a September 2016 cease-fire brokered by the two rivals quickly collapsed.

In early October 2016, Russian President Putin withdrew from a key nuclear security pact with the U.S., citing an alleged "threat to strategic stability as a result of USA's unfriendly acts toward Russia." He said Moscow would resume its participation in the agreement only if the U.S. fulfilled a long list of demands such as lifting all sanctions on Russia and providing "compensation" for losses.

During this period, when presidential campaign in the US was gathering momentum, Russia was accused of coordinating the computer hacking of Hillary Clinton's campaign emails to influence the presidential election, which was strongly denied by Moscow saying some people in the U.S. were trying to divert attention from the country's problems.

According to one analyst, anti-Western and U.S.-bashing never fully died out in Russia after the Soviet collapse — and a resurgence had occurred after Putin's return for a third presidency in 2012. In early October 2016, a Russian television anchor glorified Putin, his political course and its fierce anti-Americanism.

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Some experts have lamented that Russia's state-run information agencies publish and broadcast pro-Kremlin news in 45 languages and a substantial share of its "news reports" lambast U.S. foreign policies in the best traditions of Soviet propaganda.

The Kremlin has repeatedly accused the West of expanding its North Atlantic Treaty Organization (NATO) presence in Eastern Europe with such steps as the installation of a ground-based missile defense system and deployment of 4,000 NATO troops, the biggest military build-up since the Cold War.

Reports appearing in the Western media indicated in the early weeks of the last quarter of 2016, Russian officials, lawmakers, analysts and military leaders were engaged in talking about the possibility of a new war with the West – and tried to reassure average Russians that their lives were not in danger. The Kremlin's three days of "civil defense" drills were supposed to determine how well cities were prepared for chemical and biological attacks.

There were reports about Kremlin testing a new system of "administering provinces" that involved momentary transfer of all powers to the military — as well as "temporary" confiscation of privately owned cars, car repair workshops and bakeries for wartime needs.

The media, quoting Russian Defense Ministry, reported several test launches of new missiles, air defense systems and the deployment of advanced nuclear-capable Iskander cruise missiles to the Kaliningrad region, Russia's westernmost toehold in Europe located between Poland and Lithuania. The Kremlin says the deployment is a response to the expansion of NATO facilities in Eastern Europe.

While warning about the dangers of US-Russian friction, the former Soviet President, Mikhail Gorbachev, said: "I think the world has reached a dangerous point," the ailing 85-year-old who remains a deeply unpopular figure in Russia, told the RIA Novosti news agency in mid-October. "This needs to stop. We need to renew dialogue."

## **Towards Reconciliation**

Despite deteriorating relations between Moscow and Washington in the early months of Trump administration in 2017, both sides continued diplomatic efforts to explore the possibility of bringing this relationship on an even keel. Reports about the U.S. Secretary of State's visit to Moscow scheduled for April 11-12 evoked enthusiasm in Moscow as well as in Washington simultaneously. The scheduled visit was expected to inspire little confidence but it was generating big interest in Russia.

Undoubtedly, experts weren't expecting any major diplomatic breakthroughs during the talks between Rex Tillerson and Russian Foreign Minister Sergei Lavrov, but the trip was viewed as important nonetheless. Some analysts believed Tillerson's Moscow visit was an early attempt by Washington to clearly outline its position on pivotal international problems – in full view of the Kremlin. This might be harder said than done, given that Lavrov and the U.S. Secretary of State were expected to put considerable pressure on each other during their meeting.

Finally, Russian Foreign Minister Sergey Lavrov and US Secretary of State Rex Tillerson held talks in Moscow on April 12, 2017. As expected, no immediate breakthrough on knotty issues came forth after the talks, but it did pave way for resumption of negotiation. After the meeting Tillerson told the media persons in Moscow that there was a low level of trust between our two countries.

The Russian foreign minister Lavrov told reporters in Moscow that Russian Federation wants a global investigation of the chemical attack, but the resolution offered by the USA and its allies was aimed "more at legitimizing the arguments against Damascus". While neither Tillerson nor Lavrov cited concrete avenues of cooperation, beyond establishing a working group to address what Tillerson called "smaller issues", Lavrov agreed there were many problems. President Trump said it was "certainly possible" though "probably unlikely".

A senior Russian diplomat was quoting by media saying that Moscow believed that a global probe into last week's chemical attack in Syria should include experts from Brazil, India, Iran and other nations.

While declaring on 13 April 2017 that U.S. - Russia ties "may be at an all-time low", President Donald Trump also lost no time in saying, "The world's two primary nuclear powers cannot have this kind of relationship." In the meanwhile, Russian foreign minister Lavrov described the US missile strike as an "unlawful attack against Syria" and said such actions must be prevented going forward.

According to a Reuters report dated 13 April, Russian Foreign Minister Sergei Lavrov told his Syrian counterpart Walid al-Moualem in Moscow that Russia and the United States had a shared understanding that U.S. air strikes on Syria should not be repeated. But in Washington, the U.S. State Department said Tillerson did not eliminate the possibility the United States may undertake future strikes.

The Russian foreign minister told his American counterpart: "We are always in favor of collective steps. We do not consider any closed alliances and misalliances productive. It's very important for us to understand the US position and real intentions of your administration. I hope to achieve progress on this path today." Though there was no apparent assurance coming forth from American side.

Meanwhile, US President Donald Trump has reported now claimed his administration has no further plans in Syria. "We're not going into Syria," he said in an interview with the New York Post. "Our policy is the same; it hasn't changed. We're not going into Syria."

### **Future Prospects**

One can hope that Moscow and Washington make sincere efforts in restoring normalcy in strife-torn Syria and other parts of the globe and work jointly for a lasting peace and stability. War either nuclear or biological or chemical is not going to do any good to either side rather it is prone to

entail devastating consequences of immeasurable magnitude.

The planet Earth is already in the grip of severe crisis owing to the vagaries of climate change. The objectives of recently concluded global agreements like Sustainable Development Goals (SDGs) and Paris Agreement on Climate Change can be realized with the active cooperation and participation of all countries. Thus, it is high time that Moscow and Washington abandon the Cold War hysteria of winning over new spheres of influence and work for the prosperous sustainable future of their people in particular and for the entire humankind in general.

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# Western Sahara: World's Last Colony

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At the 28th Summit meeting of the African Union (AU) held in Addis Ababa, Ethiopia, on 30 January 2017, Morocco's readmission to the continental body generated heated discussion. At the end of the day the Kingdom of Morocco managed to win over sufficient member states on its side and it was allowed to join the fold unconditionally.

Morocco left the Organization of African Unity (OAU), precursor to the AU, in 1984 after the OAU recognized the right to self-determination and independence for the people of the Western Sahara and admitted the Sahrawi Arab Democratic Republic (SADR) that was proclaimed in 1976 by the Sahrawi people's Polisario Front.



It was in keeping with the OAU principle not to recognize the occupation of any part of the continent that it admitted the SADR to its membership. While SADR claimed sovereignty over the Western Sahara territory, Morocco saw it as an integral part of its own territory. Thus, rather than accept SADR's independence, Morocco left the OAU.

Since then Morocco has refused to join the AU unless the organization withdraws the membership of SADR.

## The Occupation of Western Sahara

The area of Western Sahara has been occupied by Morocco since 1976 when Spain pulled out and relinquished its claim as a colonial power over the territory. This former Spanish colony was then annexed by Morocco. Sahrawi people, who fought Spanish colonial oppression, were now forced to fight Moroccan occupation. They conducted resistance struggle under the leadership of Polisario Front until 1991 when the United Nations (UN) brokered a truce.

An UN-supervised referendum on independence of Western Sahara was promised in 1992 but it was aborted by Morocco. A UN peacekeeping mission that was to organize the referendum has remained in the territory ever since, while Morocco built a 2,700km-long sand wall, with landmines.

SADR, headed by the Polisario Front, has been recognized by the AU as the legitimate government in exile. For decades Morocco made futile attempts to delegitimize SADR and Polisario. Eventually it applied to rejoin AU without precondition.

AU member states argued that Morocco should not be readmitted unless it accepts the 1960 UN Declaration on the Granting of Independence to Colonial Countries and Peoples, which states that, “All peoples have the right to self-determination; and by virtue of that right they freely determine their political status.”

Morocco was also asked to accept unconditionally the OAU/AU African Charter on Human and Peoples’ Rights which provides that: “Nothing shall justify the domination of a people by another. All peoples shall have the unquestionable and inalienable right to self-determination. They shall freely determine their political status.”

Thus, before readmission Morocco should have accepted all the 33 Articles of the Constitutive Act of the AU with Western Sahara as a founding member. Morocco should also accept the AU Act which recognizes African colonial boundaries, thus making its continued occupation of Western Sahara illegal.

All this was thrust aside and Morocco was readmitted to the AU when 39 out of the 54 African member states voted for Morocco. They tacitly endorsed the longstanding occupation of Western Sahara, while Morocco refuses to

comply with the successive UN resolutions on the holding of a referendum on self-determination.

Western Sahara thus remains the continent’s last colonial outpost, occupied by another African state. It is an albatross on the African Union’s conscience, since it was a departure from its founding principles.

The notable US professor Stephen Zunes (a professor of politics and international studies at the University of San Francisco, the co-author (along with Jacob Mundy) of the illuminating book *Western Sahara: War, Nationalism, and Conflict Irresolution* (Syracuse University Press.), says:

“For those of us who have actually been to Western Sahara, there is no question that it is an occupation. Any verbal or visual expression of support for self-determination is savagely suppressed. Even calls for social and economic justice can be dangerous. The young sociologist Brahim Saika, a leader of a movement of unemployed Sahrawi professionals demanding greater economic justice, was tortured to death while in Moroccan detention in April 2016. Freedom House has ranked Western Sahara as among the dozen least free nations in the world, along with Tibet, Uzbekistan, North Korea, Saudi Arabia, and Sudan. Indeed, of the more than 70 countries I have visited — including Iraq under Saddam Hussein and Indonesia under Suharto — Western Sahara is the most repressive police state I have ever seen.”

### **Morocco’s Goodwill Tour**

Morocco’s readmission was reportedly influenced by Morocco’s King Mohammad’s affluence. This became evident when he demonstrated his largesse while touring the continent, lobbying for support from African heads.

It is said he will now bankroll the AU in line with what Libya's Muammar Gaddafi used to do. The two are, of course, poles apart. Gaddafi, arguably, had a pan-Africanist and anti-imperialist vision, while the King aims at continued annexation of Western Sahara.

That is why prior to the AU vote the King embarked on a charm offensive by touring African countries, seeking support for his AU bid. In February 2014, he set off on a tour of Mali, Ivory Coast, Guinea and Gabon. This was his second regional trip in less than five months. He took with him a contingent of advisors and business executives who negotiated a pile of agreements covering practically everything – from religious training to agriculture and mining projects.

In December 2016, the King concluded the second leg of a nearly two-month, six-country Africa tour, resulting in some 50 bilateral agreements. The visits came on the heels of trips to Rwanda, Tanzania, and Senegal in October, when more than 40 bilateral agreements were signed.

This is how the monarch wound up his whirlwind tour of Africa prior to the AU Summit meeting in January 2017. For those who say the royal expeditions to African countries had altruistic motive, suffice it to quote his official who said:

Aside from west and central Africa we must open up to east Africa and that is what is under way. The context of Morocco's return to the African Union is there too of course, and these are important countries in the AU.

The tour of east Africa "is also a way to get closer to countries which historically had positions which were hostile to Morocco's interests," said the Moroccan source.

In some circles it is argued that Morocco's readmission was a 'positive' step in that, as full

member of the AU, it will now have to recognize the independence and sovereignty of SADR. If that is so then the readmission should have been conditional.

In any case, Morocco has no intention to give in on its occupation. Its return to the union is intended to eventually push for the removal of Western Sahara out of the AU, thus silencing the voice of the Sahrawi people in connivance with 'friendly' member states.

Yet while the AU fails to stand by such principles, the kingdom of Morocco is under pressure in the international diplomatic arena where Polisario is gaining global support. In fact, on 21 December 2016, a few days before the Addis Ababa Summit, the European Court of Justice (ECJ) dismissed Morocco's claim to Western Sahara. The ruling means the European Union's trade deals with Morocco do not apply to the occupied territory of Western Sahara which is endowed with its fish stocks, mineral deposits, agricultural produce and oil reserves.

### **The UN and the European Union**

The ECJ ruled that Western Sahara cannot be treated as a part of Morocco, meaning no EU-Morocco trade deals can apply to the territory. The ruling confirms the long-established legal status of Western Sahara as a non-self-governing territory, and upholds existing international law. The EU member states and institutions have been asked to comply with the ruling and immediately cease all agreements, funding and projects reinforcing Morocco's illegal occupation of Western Sahara.

The Court also ruled that a trade deal between the EU and Morocco should be scrapped because it included products from Western Sahara. Morocco had to accept that any free trade deal would have to exclude Western Sahara. This includes the fruits and vegetables grown by

companies such as Les Domaines Agricoles, which is partly owned by King Mohammed VI.

On top of this, there have been more than 100 UN resolutions calling for self-determination for the Western Sahara. In March 2016, the then UN Secretary General Ban Ki-moon described the situation in Western Sahara as an “occupation.” The UN, however, has to go beyond rhetoric by enforcing its resolutions. It formally recognizes the occupation of Western Sahara as illegal, and has maintained a peacekeeping mission (MINURSO) commissioned to hold a referendum in Sahara since 1991. But it has a skeleton staff, with no mandate to even monitor human rights abuses, thanks to France’s Security Council veto.

And so the French oil company Total is active in Western Sahara, while others have pulled out. Also big investors such as the Norwegian government’s pension fund avoid any deals which involve Western Sahara. And the EFTA free trade association, a group of non-EU countries including Norway, Switzerland, Iceland and Liechtenstein, excludes Western Sahara goods from its free trade deal with Morocco.

Morocco’s return to the AU is an affront not only to the people of Western Sahara but to African people, for Morocco is a country that once

refused to host the African Cup of Nations on flimsy grounds that Moroccans would be infected by African teams bringing in Ebola virus.

Some African heads claim that the admission of Morocco will now resolve the question of Western Sahara’s occupation. Such argument is always pushed with some foreign machination. In fact Morocco is now emboldened. That is why those who voted for readmission of Morocco should have demanded an end to the illegal occupation as a precondition.

That did not happen at the AU Summit meeting in Addis Ababa. Instead we see the AU blatantly violating its own Constitutive Act, and the principle for African countries to respect each other’s territorial boundaries.

We witness a violation of both the AU and the UN declarations on the inalienable right of the people of Western Sahara to independence and self-determination.

Meanwhile, hundreds of thousands of Sahrawi people are disenfranchised. It is estimated that up to 200,000 have fled to refugee camps in the neighbouring Algeria and Mauritania. They are separated by a 2,700km-long wall going through Western Sahara, surrounded by landmines.



## **PERSPECTIVES ON WOMEN**

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# Pakistan-China Nuclear Relations

Harjit Singh\* & Madhu Bala\*\*

*[The United State had turned a blind eye to Pakistan's Nuclear Weapons programme, aware of the fact that Islamabad was violating an earlier assurance to President Regan. He wrote to General Zia in 1984 that the US would cut off aid, if Pakistan raised the enrichment level of Uranium above five percent.<sup>1</sup> After the withdrawal of US aid, Pakistan turned towards China and China has played very important role in Pakistan's nuclear programme. In order to enhance its position in the indo-Centric South Asian region, it has developed close relationship with Pakistan.]*

The relation between Pakistan and China, despite many political changes within the two countries, has remained stable during the past 59 years. Strategic and political considerations did more to influence the course of relation between Pakistan and China than any other factor. The Sino- Pakistan relationship is rooted in the mutual self-interest.<sup>2</sup>

An important dimension of increasing Sino-Pakistani friendship is their mutual cooperation in the field of nuclear technology. India's concern about such Sino- Pakistani nuclear cooperation had grown after the U.S. Intelligence reports indicated that there had been a certain extent of nuclear collaboration between the two countries since 1965. The officials of both countries denied having any nuclear link between them. Hence, keeping in view the nature and extent of cooperation between Pakistan and China, a historical development of Sino-Pakistani relation would not be out of place here.

Pakistan and China are close neighbours. The history of relations between the two countries dates back to period when merchants, pilgrims, scholars and diplomats travelled on camel or on horseback through the silk route from one country to other. During the period of colonialism, however, contacts between the people of China and Pakistan were restricted at both official and unofficial levels.

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Following the first British aggression against China in 1856 or the Opium War as it is better known, China's foundation as a state was sapped. As a result, chaos and confusion prevailed in China for a long time. The condition of the Muslims of the subcontinent in the nineteenth century was no better than that of the people of China. They were badly treated by the British for taking active part in the so-called mutiny of 1857.

It was after a long and bitter struggle against both the Hindus and British that Muslims of the subcontinent succeeded at last in establishing a state of their own. More than eight years of Japanese intervention and three decades of civil war in China had almost wholly disrupted the economic life as well as peace and order in the country. In 1949, Communist emerged victorious. Pakistan was the first Muslim country to recognise the new regime and to establish diplomatic relation with it.<sup>3</sup>

In 1951, when China entered the Korean War to safeguard her security, Pakistan abstained from voting on the General Assembly resolution branding China as an aggressor. The Chinese leaders appreciated Pakistan's stand. When following the Korea war there was a big slump in world trade, China imported a big portion of Pakistan's raw cotton and jute, thus helping the latter to avert the economic crisis.<sup>4</sup>

Prime Minister Zhou En Lai met with Prime Minister Mohammad Ali and said that the latter had assured him that Pakistan had no fear that

China would commit aggression against it. As a result of that 'we have reached mutual understanding.'<sup>5</sup>

China became suspicious of Pakistan when it joined the SEATO and CENTO. These military pacts were designed as a cordon sanatorium to contain the Communist aggression. Pakistan tried to join CENTO and SEATO. Prime Minister Zhou En Lai of China and Mohammad Ali Bogra of Pakistan met each other at the Afro-Asian conference in Bandung in April 1955. About the meeting Zhou-En-Lai said that 'we achieved mutual understanding, although we are still against military treaties.'<sup>6</sup>

Sino- Pakistani relations suffered a slight set back in 1959 when Pakistan opposed China, when the latter entered in Tibet that year. China held that Pakistan was meddling in its internal affairs by commenting on Chinese military intentions. Around this time, officials of China also appeared on Pakistani border adjacent to China. Pakistan also questioned China's claim to Taiwan. However, these stresses and strains were absorbed by the real political needs of both the countries.<sup>7</sup>

Pakistan's relations with China began to improve after India rejected Ayub's proposal of a mutual defence pact. When the Sino- Indian war broke out in 1962, the United States immediately sent military and other help to India. Relations of Pakistan during this time became friendlier with China. On March 2, 1963, Pakistan and China concluded an agreement to demarcate the boundary between Pakistan-occupied Kashmir (POK) and China's Xinjiang. By this agreement, Pakistan made a gift of 2,050 square miles of Indian territory to China.<sup>8</sup>

However, India strongly opposed this agreement between China and Pakistan. To India the agreement was "Illegal and invalid." Pakistan and China treated by New Delhi as enemy moved much closer to each- other and India moved closer to the Soviet Union. With the posting of Major-General N.A.N as Pakistan Ambassador to Beijing in August 1962, the process of negotiation

between Pakistan and China over the frontier demarcation gathered momentum on 2 March, 1963.

Pakistan and China having a keen desire for peace on their borders, signed the boundary agreement in Beijing. As a result Pakistan gained 750 miles of territory containing grazing land and salt mines which had been under the actual possession of the Chinese.<sup>9</sup>

Moreover, a trade agreement between Pakistan and China signed on 4th January 1963 provided for commercial exchanges on the basis of most-favoured-nation (MFN) treatment. Soon after this an air agreement of 26th August 1963 established the PIA Dhaka canton Shanghai air service. Although basically a commercial deal, its importance was not less worthy because China by acquiring access to the world by a major air link, frustrated the efforts of some countries to isolate it.

On 13 February, 1965 direct radio and telecommunication links between Pakistan and China were also established.<sup>10</sup> Perhaps, the most important development in the Sino- Pakistan friendship both from the military and commercial point of view was the reopening of Silk Route, linking Xinjiang with the Hunza Valley in Pakistan to traders in 1967. The Karakoram highway was started jointly by Pakistan and Chinese engineers. The opening of high way boosted trade between Pakistan and China and created an important link between the two countries to be used in case of any emergency. The strategic importance of the Karakoram highway is very obvious. It links Xinjiang with Tibet through the Aksai China in case of an attack on Pakistan by sea.<sup>11</sup>

In the Indo- Pak war of 1965, China condemned India's unbridled aggression against Pakistan and rejected India's claim that the attack on Lahore was a defensive measure.<sup>12</sup> China gave an ultimatum to India on 16 September to dismantle all military installations on/ over the China-Sikkim border. This move not only failed the Indian plan to attack East Pakistan but also led

to the easing of military pressure on Sialkot front in West Pakistan.<sup>13</sup>

The most important development in Sino-Pakistan friendship both from military and commercial point of view was the reopening of Silk route, linking Xinjiang with the Hunza valley in Pakistan to trade. In 1967, Pakistan during this time decided purchasing arms from China. The first agreement for the military assistance of the value of \$ 120 million was signed between Pakistan and China in July 1966, and within two years China supplied to Pakistan 100 T-59 Tanks, 80 MIG 19's and (F-6) and 10 II yshin-28 bombers.<sup>14</sup>

China gave huge military aid to Karachi. Since September 1965, China has supplied to Pakistan complete equipment for infantry division. The ordnance includes battle tanks, fighter aircraft trainees, naval ship and submarines. According to Chinese foreign Minister, arms transfer to Pakistan was within China's sovereign right. Such military supplies were given free of cost till 1978 and then at cost price.

China also agreed to render all help to Pakistan in setting up an industry for ground-to-air missile. It included ballistic missile production plant in Kalachata Mountain range near Islamabad, called National defence complex. Chinese technicians have been seen for production of China-assisted missiles including M-11, rocket motor, propellants and guidance system. Pakistan has also tested Shaheen missile base on M-9. Shaheen-II has bridged the gap in Pakistan nuclear delivery system and its ability to strike India has increased manifold.<sup>15</sup>

By 1970, as a writer puts it, the tanks supplied by China already constituted 25 per cent of the entire tanks' force at Pakistan's disposal. The aircraft supplied by China constituted 33 Per cent of the Pakistani air force's 270 planes, 65 per cent of all interceptor bombers and 99 per cent of its first line modern fighter planes.<sup>16</sup>

In 1971 war between India and Pakistan, China's help was minimal. Only after the war, China

supplied military hardware to Pakistan. In fact, Chinese interest in Pakistan security issue increased after the 1971 war and it seems to be embodied in the special strategic relationship between China and Pakistan.

The most important dimension of the increasing Sino- Pakistani friendship is their mutual cooperation in the nuclear field. The suspicion that the China was helping the Pakistan to reach nuclear capability can be traced back to June 30, 1966 when an agreement was signed by the two countries for "economic and technical assistance". At the time the then commerce minister of Pakistan, Ghulam Tariq, stated that an economic power station would be built at Rupur and Panna district of East Pakistan with Chinese help.<sup>17</sup> This was the first hint of the cooperation between the China and Pakistan.

In 1971, Pakistan received from China tanks and guns; nine Shanghai class Motorboats of which four could be converted into firing missiles.<sup>18</sup> It may not be impertinent to point out here that the Chinese weapons to Pakistan, so far as their quality and quantity were concerned, could not match the soviet weapons but their political impact was much the same. The most significant contribution of China to Pakistan's defence needs has been establishment of a heavy chemical complex and heavy foundry and forges near Taxila. This is the first industrial complex of its kind established by China in a non- communist country.

Now, Pakistan can produce ammunition and spares for Chinese equipment. A tank-rebuild factory and arms plant with facility for repairing MIG 19 F-6 have also been established with Chinese assistance at the Kamra near Attock. The foundation stone of the heavy electrical complex to be built with financial and technical assistance from China was laid down in April 1986 at Hatter at Haripur in the NWFP. It was to produce 500 KV power transformers and associated equipment. China has been sending experts to Pakistan on training mission and a few licenses have also been granted for the productions of Chinese weapons.<sup>19</sup>

Since 1965, all the three branches of Pakistan military have received Chinese weapons. The arms supplied in the 1970s were older models but as production increased, the design of the Chinese weapons and aircraft improved. The F6 fighters (MIG-19) were produced in large numbers<sup>20</sup> Pakistan received 24 F-6S with T-59 trainers from China in 1978. With an increase in China's air force strength, the productions of F-7 (MIG) 23 went up.

Military assistance to Pakistan also increased in proportion to the increase in China's defence productions. The terms of assistance were reported to be generous. In 1981, China delivered 25 F-6s to Pakistan and by the end of 1982 the total numbers of planes delivered to Pakistan rose to 300. The F-6 was specially built to meet Pakistan air force requirements. In 1985 China supplied 50Q/A-5 fighters to Pakistan and this was in addition to 60 already in service.

The Q-5 Fanton was first supplied to Pakistan in 1978 and their deliveries continued at the rate of 50 a years.

Apart from airplanes, Chinese military aid to Pakistan from 1970 to date include almost 1000 tanks, more than 30 naval vessels, surface-to-air missile batteries, gun boats, light weapons and ammunition. The Chinese tanks, like aircraft are improved copies of Soviet battle tanks of the 1950s. Although China's capacity and resources to produce tanks for export is limited, it supplied Pakistan with a considerable quantity of Type-59 tanks with a provision for mounting a 12.7 mm anti-aircraft gun. Pakistan was reported to have ordered 1000 type 59s in 1975. It received 50 annually beginning in 1978 and by 1983 it had a total of 900 type-59 tanks.<sup>21</sup>

Till 1975, the Chinese help to Pakistan was mainly with regard to conventional military requirement. By mid-1976, Bhutto convinced the Chinese leaders that Pakistan was determined to acquire nuclear capability. He welcomed the Chinese help, as it would make Pakistan's task easier. This was a tempting offer since URENCO plant was the first commercial scale centrifuges

plant. A centrifuge plant is cheaper than the diffusion techniques plant in terms of consumptions of electricity. Therefore, the Sino-Pakistan nuclear cooperation efforts are regarded as a mutually beneficial deal.<sup>24</sup>

China decided to have a nuclear accord with Pakistan and during Prime Minister Mohammad Khan Junejo's visit to China in 1985, the decision was reached between the Chinese and Pakistani leaders. Finally on 15 September, 1986, the Sino-Pakistani nuclear accord was signed. This cooperation in the nuclear field gave a new dimension to the existing relations between the two countries. It was not for the first time that China had a nuclear cooperation agreement with any country. The pattern of Sino-Pakistan accord is similar to the agreements China has with the United States, Japan and Brazil.<sup>25</sup>

On nuclear accord both the prime ministers declared that the agreement was for peaceful purpose only. China's Prime Minister Zhao Ziang observed, "Although China did not subscribe to NPT and regarded it as discriminatory, it did not believe in the proliferation of nuclear weapons nor did it help any other country to do so."<sup>26</sup>

Pakistani Foreign Minister was of the view that his country also believed in peaceful use of atomic energy and did not want to develop or acquire nuclear weapons.<sup>27</sup> It was argued by the Pakistani and Chinese scholars that this accord provided for safeguards against the proliferation of nuclear weapons. According to them, Pakistan and China had incorporated in the agreement all the safeguards laid down by International Atomic Energy Agency (IAEA) to cover all materials and equipment transferred under the accord.

Pakistan gained much from this nuclear accord with China. For economic development of Pakistan, nuclear technology is indispensable. According to Pakistani officials, the main benefit from this accord was its energy requirement. Just a few days before the signing of this accord, Dr. Munir Ahmad, the chairman of the Pakistani Atomic Energy Commission said that it would bridge the gap between its power requirements

and availability. Pakistan was planning to set up a few nuclear power plants.<sup>28</sup> It would help in the utilization of nuclear energy for industries, agriculture, medicine and power generation under IAEA safeguards.

It is for the first time that China provided assistance to a country for the development for nuclear weapons. In the early 1970s, China had rejected a Libyan request for sale of nuclear device.<sup>29</sup>

It is important to note that China increased its military assistance to Pakistan soon after the Soviet armies entered Afghanistan. Besides, China was ready to join in giving international guarantees demanded by the Soviet Union as a part of the deal to resolve the Afghanistan conflict. But China considered the demand for international guarantees before troop withdrawal like putting the cart before the horse. The foreign minister of China, WU Xuequan, said in a statement given during his visit to Islamabad on 29 July 1983, that the Russians had created the problem which resulted in the exodus of Afghans from their homeland. Only they could resolve it by pulling out of Afghanistan. He cited the Chinese proverb that “he who ties the bell around tiger’s neck should untie it.”<sup>30</sup>

Besides providing help in the nuclear field, China is also assisting Pakistan in manufacturing new ballistic missiles. The Hatf-1, Hatf-2 missiles which were successfully tested by Pakistan, had been developed with the Chinese help. In January 1990, Pakistan military delegation led by General Aslem Beg went to Beijing to negotiate the purchase of M-9 missiles, as part of more general discussion on expanding Sino- Pakistani defence cooperation.<sup>31</sup>

In a recent bi-annual report to the United States Congress, the Central Intelligence Agency (CIA) stated that Chinese entities continued their supply of nuclear and fissile materials to Pakistan during the period July to December 2001. According to the report, Chinese entities have been the principal suppliers of Pakistan’s serial production of solid-propellant-short range-Ballistic missile (SRBM’s) such as Shaheen-I

and Haider-I. Moreover, the successful development of the Shaheen –IRBM (Medium range ballistic missile) will also require continued Chinese assistance.

The report suggest that China has continued to interpret its non-proliferations commitments narrowly in the area of supplying nuclear and missile related materials to its key allies in the developing world, especially Pakistan.<sup>32</sup> China’s support included a secret blueprint for a nuclear bomb in the early 1980s, highly enriched Uranium, Tritium, scientists and key components for clear weapons productions complex. China’s supplies include 500 ring magnets useful in a gas centrifuges that can make weapons grad enriched uranium(1004-95), Tritium used to boost the yield of atomic weapons (1986), heavy water needed to operate reactors to produce weapons-grade plutonium , a special industrial furnace to melt plutonium or enriched Uranium into the shape of nuclear bomb core (1996); high tech diagnostic equipment (1996), nuclear weapons design in 1983 and highly enriched Uranium for the production of one or more Nuclear weapons(since 1983).

More significantly, China has provided assistance in the building of unsafeguarded Khushad reactor from which Pakistan is known to draw plutonium for weapons productions. China has also been the major supplier of the IAEA safeguarded Chashma reactor and plutonium reprocessing facility and the PARRZ-reactor at the Rawalpindi.<sup>33</sup> A report in the *New York Times* in 1989, presented that Chinese Navy supported Pakistan vividly.

In the beginning of 1990, Pakistan is believed to have built between 7- 12 nuclear warheads based on Chinese designs assisted by Chinese scientists and Chinese technology. That technology included Chinese magnets for producing weapons-grade enriched uranium, a furnace for shaping the uranium into nuclear bomb core and high- tech diagnostic equipment for nuclear weapons tests.

According to a *Time* magazine report in 1997, the CIA discovered that China has helped

Pakistan to set up a factory to manufacture M-II surface-to-surface missile near Rawalpindi, in addition to supplying thirty beady to launch M-II, which are stored at the Sargodha air base near Lahore. These missiles, with a warhead of 1100 pounds and a range of 185 miles, could be ideal for Pakistan's nuclear weapons and can be targeted on Indian cities close to Pakistan border.<sup>34</sup>

Indicating the magnitude of recent arms supplier to Pakistan, China has delivered 77 Qiang-5 (Fantan) fighters by fitting modern fire control radars and other avionics, and also modern enhanced considerably.<sup>35</sup> The PAF is in possession of 170 Shenzhang J-6, 45 Shenzhang J.J.-5, 69 MIG 17U and 12 Shenzhang CJ-6. The Chinese are also supplying 150 modernized fighter aircraft to Pakistan which are fitted with new western made engines and advanced American avionics, the new Sabre-II. Pakistan is also going with co-production of this aircraft at the Kamra base.<sup>36</sup> Chinese have supplied four Huang-fan class (OSA-I) missile attack craft, which were delivered at Karachi in August 1984 on a Chinese powered barrage.<sup>37</sup>

Huang-fan is the largest and the latest in China's missile boat inventory. This was in addition to other suppliers made earlier such as Holan, hoku Shanghai II fast attack craft (FAC) and Huchwan Hydro-fore FAC (Torpedo).<sup>38</sup> Pakistan has also been negotiating the purchase of an unspecified number of nuclear submarines of China which may take its navy into the new age with one or more Chinese built attack submarines.<sup>39</sup>

In October 1986, the then foreign minister of Pakistan Yahya Khan, while on a visit to China, signed an agreement for cooperation in the area of nuclear energy. It renewed fears of covert Chinese assistance to Pakistan's nuclear weapons programme. According to U.S. military sources, Chinese nuclear scientists have been working in Pakistan's nuclear facility at Kahuta to learn the gas diffusion process to purify uranium and in the bargain had made available its weapons design of fourth bomb of Pakistan.

The Chinese design enabled Islamabad to produce a much more sophisticated atom bomb

than the crude five-ton weapon America dropped in Japan during the Second World War in 1945. The report suggested that, China had even allowed Pakistan to detonate nuclear device on its soil. China has also set up 300 MW Chashma nuclear plants besides helping establish 40 MW Khushab plutonium producing reactor and facility for extracting weapon grade plutonium from spent fuel.<sup>40</sup>

Even after Pakistan's nuclear tests in 1998, China is reported to have continued its assistance to Pakistan by helping to establish the 50 MW Khushab reactors which will produce weapons grade plutonium although such a help is in direct violation of article III of the NPT. There are some indications that China may have limited direct nuclear transfers since the late 1990s largely because Pakistan perhaps no longer needs such assistance as it has already acquired operational nuclear force thanks mainly to Chinese assistance.<sup>41</sup>

Despite international scrutiny, in 1991, China agreed to build the Chashma 300 MW nuclear power reactor for Pakistan. In order to lend international credibility to this exercise, Pakistan was asked to sign an IAEA safeguards (limited scope) agreement for the reactor at Chashma. Further attempts at proliferation were seen in 1995, when 5,000 specially designed ring magnets from the China Nuclear Energy Industry Corporation (CNEIC) were sold to an unsafeguarded Pakistani nuclear facility.

Pakistan's nuclear links to North Korea were first reported in October 2002, when press reports suggested that nuclear material and technology for uranium enrichment were transferred to North Korea since 1997. In July 2011, A.Q Khan made further revelations on the nuclear trade between Islamabad and Pyongyang, alleging that \$3.5 million was paid to senior Pakistani officials to facilitate the agreement. Collaboration with North Korea for missiles was acknowledged by Benazir Bhutto.<sup>42</sup>

China has agreed to supply Pakistan with its fifth and possibly sixth Chinese-designed nuclear power reactor since the first joint reactor project was launched in the mid-1990s. The deal,

reached in mid-2013, will mark the first time China has exported its new ACP-1000 pressurised water reactor (PWR), which is capable of producing 1,000 megawatts (MW) of electricity. Despite the civilian nature of the project, the deal for additional Chinese-built power reactors has raised concerns among international observers that it may contribute to Pakistan's nuclear weapons programme and increase the risk of proliferation in the region.

The agreement between Beijing and Islamabad also feeds into a wider debate about the future of the global nuclear non-proliferation regime, as it will almost certainly exacerbate a conflict over the global terms of nuclear trade between the world's leading nuclear supplier states – including France, Japan, Russia, South Korea, and the United States – and most of the 190 members of the nuclear Non-Proliferation Treaty (NPT).

According to senior management at the Pakistan Atomic Energy Commission (PAEC) and Pakistan's nuclear regulatory authority, in 2008, Pakistan had sought to obtain a Chinese-designed 1,000-MW PWR since at least the early 2000s. To this end, the PAEC, which is responsible for all construction and operation of nuclear power plants in the country, purchased and earmarked a site near Karachi during the 2000s for one or more of these advanced PWRs.

In 2011, a Pakistani consultant for the nuclear programme said that intellectual property considerations inhibited China from exporting a 'two-loop' PWR unit to Pakistan. Beginning in the 1990s, Westinghouse Electric Company in the US and Framatome (now Areva) in France began working with the Shanghai Nuclear Engineering Research and Design Institute to design a 1,000-MW 'three-loop' PWR, designated the CNP-1000 in China.

According to Pakistani officials in 2008, the export of these reactors to Pakistan was put on hold for reasons including intellectual property considerations. In early 2013, China announced it had "developed independently" an "advanced

third-generation" 'three-loop' PWR designated the ACP-1000, having "entirely independent intellectual property rights". This is the reactor design that Pakistan now intends to import, most likely at the site earmarked near Karachi.<sup>43</sup>

To sum up, it can be said that China-Pakistan nuclear cooperation began in the 1970s during the tenure of Prime Minister Zulfikar Ali Bhutto. This cooperation reached its peak in the 1980s and the early 1990s, when Beijing assisted Pakistan in building its nuclear capability. The precise nature of Sino-Pakistani nuclear cooperation is not fully known but U.S. intelligence sources have long contended that the Pakistan nuclear bomb project would not have come into being without active support of China.

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# Fatal Spiral of Senselessness

Tomislav Jakić\*

*[In this brief article an attempt is made by the author to demonstrate ambiguities in American President's foreign policy narratives – during the election campaign and after becoming the US President – especially on Syria. Terming President Trump's tone and tenor of foreign policy statements and actions, the author calls them as 'fatal spiral of senselessness', which " we have entered is, without any doubt, leading us in that direction." Ed.]*

After a whole day of long awaited negotiations in Moscow, one thing is absolutely clear. Result is: zero; surprise? Not at all, despite the fact that Donald Trump successfully cheated the whole world with his, for more than half a year repeated, mantra of the "new American foreign policy", of abandoning imposing regimes and the American way of life. So, whoever expected any positive results from the meetings between ministers Lavrov and Tillerson and between President Putin and the guest from the US, proved to me, to say the least, naïve.

Because, acting – only days before this meeting - in the manner of the "Lone Ranger", characteristic to those who preceded him, the new American President made a personal U-turn and provoked another. Launching 59 cruise missiles Tomahawk to bombard a Syrian air force base, Trump – first of all – did what he for months was promising not to do. Not only once in the election campaign and especially in his inaugural address Donald Trump solemnly promised that the United States will no more impose regimes, that they will not take part in senseless wars (like the one in Syria), that they will stop acting as the world policeman.

Moreover he "forgot" his messages to Barack Obama, years ago, that he cannot act militarily against Syria without Congressional consent and that such an action would be a "grave mistake".

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Let us go a step further. Trump even did not bother to "produce" an excuse for the attack. And let us be crystal clear. Nobody with a clear mind would "buy" the story that Assad's forces launched a chemical attack against rebels, especially if one has in mind two key elements. First, Assad's forces are gaining ground (so why would he risk such an attack, provoking a possible American reaction) and, second, the Syrian chemical weaponry, handed over some years ago at the Russian initiative, was destroyed by – the Americans.

It is worth mentioning that staging false pretexts for military interventions abroad is a long-term tradition of the American foreign policy. We do not need to go back to Teddy Roosevelt and Panama. Let us just remember the fake accident in the Gulf of Tonkin, which marked the beginning of the Vietnam War and let us not forget the – equally fake – story about Saddam Hussein's weapons of mass destruction, which marked the start for the invasion of Iraq.

At that time the American policy at least tried to stage a more or less plausible story (a full month of political-propagandistic preparations before Iraq was attacked). Nothing of that sort was needed by Trump. Without any solid evidence, without findings of any investigators on the spot, he "knew" (and the leaders of many European countries repeated after him, like reciting a poem) that the only person responsible for the use of chemical weapons can and is – Assad (after that there were attempts to construct, indirectly though, a Russian responsibility too). And Donald Trump attacked.

By doing so, he demonstrated two things. First, that he knows nothing about politics, because he completely forgot the Russian component of which he will be remembered one day after the attack on Syria by the Russian prime minister Medvedev who quite clearly stated that “the US are on the verge of war with Russia”. Alas, that he is a political amateur was a very well known fact, even to those who voted for him. But, he demonstrated something that the majority of his supporters did not expect – because all of them did not vote for Trump just to express their support for building the wall along the border with Mexico.

He demonstrated that he is ready, without hesitating, to abandon the concept of the new American foreign policy, most probably the product of some of his staff members, maybe General Michael Flynn, who was forced to resign. So, this is Trump’s U-turn. The other U-turn he provoked was in the attitude of almost all who until yesterday could not stop attacking him. And they, so called liberals, political analysts, columnists, mainstream media, neo-cons like Senator John McCain and all like him, they are now more than happy with Trump.

Not only that they accept him, they even glorify him, which is – for example – reflected in the statement that “on the day he bombarded Syria, Trump became President”. In Europe old-style politicians and their media followers are delighted that the American foreign policy is finally returning where it should be, that nothing is going to change and that the US will not allow anybody else to become Number 1 in the world.

Both U-turns show that the world is again entering the fatal spiral of senselessness, that was guaranteed by Hillary Clinton and that could have been interrupted, as many hoped, thanks to Trump and his collaborators. And there is another indication that supports this way of thinking, an indication for the continued policy of “inventing” enemies, so desperately needed both by the military – industrial complex and the deep state.

A member of the US Congress, a Democrat (and they are traditionally more open if not closer to the left side of the political spectrum, than the Republicans) proposed the reactivation of the law against Nazi-propaganda from the Roosevelt days before WW2. If she had in mind the necessity to prevent the more and more present anti-Semitism, intolerance and racism – which is a characteristic not only of the US, but of the US too, it would be OK. But no, she proposed the reactivation of the law that should have prevented Nazi-propaganda in order to “defend” the US from Russian propaganda which is “undermining the very basis of democracy”.

Only yesterday, did you forget, this propaganda was accused of making Trump the President of the US and Trump was called “Putin’s useful idiot”. But who is interested in such details anymore? Now, after the bombardment of Syria, after America emerged again as it always was? Nobody! The very fact that there is an initiative to apply to today’s Russia (formally democratic, although with clear authoritarian tendencies) an old law intended to prevent Nazi-propaganda, and Nazism is in its essence, in theory and practice, the very negation of democracy, proves that the West really desperately needs an enemy; if there is not a real one, then a fake enemy.

And for what purpose is such an enemy needed? With an enemy on the horizon it is much easier to unite the voting machine in one’s own country, as well as those in the allied countries, not to say: in the satellite countries. On the other hand, and this is even more important, with an enemy “in sight” one can create conditions if not for waging war, than for sure for preparing for war. And it is no secret that in such conditions good money can be made.

The whole policy of “containing Russia”, waged for years by encircling Russia with NATO members, the whole propaganda campaign aimed at projecting Russia as tomorrow’s aggressor – according to prominent and in the past reliable media in the West – all of this is aimed at one goal: to make the public opinion prepared and

ready to accept growing expenses for defense (or even substituting the professional armed forces with the mandatory serving in the army for every citizen). All of this is aimed at convincing citizens/voters that “our” media (and “our” politicians too) are telling the truth, while the Russians, both media and policy makers, are lying.

And finally, all of this is aimed at making the public opinion understand why whistleblowers from the intelligence structures, people who at one point listen to their own conscience and tell openly what they are doing, should be treated – and punished accordingly – as “inner danger” for the national security.

Initiatives such as the one for applying the law meant to prevent Nazi-propaganda to what is described as Russian propaganda (although it is not seldom more accurate and objective than what is being served by the mainstream media in the West), as well as further escalation of the war in Syria lead only to one conclusion: seemingly senseless, but at the same time quite logical. In order to survive the liberal capitalism, which is ruling the greatest part of the world, needs a new, great war. The fatal spiral of senselessness which we have entered is, without any doubt, leading us in that direction.



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## Neo-religionism of the post-ideological Russia (Refeudalisation of Europe –Part I)

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**T**he lonely superpower (US) vs. the bear of the permafrost (Russia), with the world’s last cosmopolite (EU) in between presents a strange geo-political scenario. Is the ongoing calamity at the eastern flank of the EU a conflict, recalibration, *imperialism in hurry*, exaggerated anti-Russian xenophobia or last gasp of *confrontational nostalgia*?

Just 20 years ago, the distance between Moscow and NATO troops stationed in Central Europe (e.g., Berlin) was more than 1.600 km. Today, it is only 120 km from St. Petersburg. Is this a time to sleep or to worry? ‘Russia no longer represents anything that appeals to anyone other than ethnic Russians, and as a result, the geopolitical troubles

it can cause will remain on Europe’s periphery, without touching the continent’s core’ – was the line of argumentation recently used by Richard N. Haass, President of the US Council of Foreign Relations. Is it really so?

Is there any intellectually appealing call originating from Russia? Russia is a legal, not an ideological, successor of the late Soviet Union. Many in Greece, Latin America and elsewhere in the world mingled the two. Does it still today represent a lonely champion of antifascism and (pan-)Slavism?

Is the Slavism, identity, secularism and antifascism, while abandoned in Eastern Europe, confused perhaps by the mixed signals from the

austerity-tired Atlantic Europe and *über*-performing Central Europe?

For the EU, Ukraine is (though important) an item of the Neighborhood Policy and for the US it is a geopolitical pivot. However, for Russia, it is all this plus emotional attachment. Without Ukraine, to what extent is Russia Christian and European?

Is the EU a subject or a hostage (like Ukraine) of the mega-geopolitical drama whose main and final stage is in the Asia-Pacific theater? What is the objective here – the ultimate score (territorial gain) or an altered style of the game (new emotional charge of confrontation added to the international relations)? What is a road map, an exit, a future perspective – relaxation or escalation? Hegemony, *hegemony*, or a global (post-dollar) honeymoon?

### **New religionism: Powerful self-imposed deterrent**

Without a socio-political cohesion via integralism, it is rather impossible to reverse the socio-economic decomposition of Russophone and Eastern Europe. Unity for cohesion does not mean a (rigid communist) unanimity. But, Europe's East is still mixing the two. Consequently, all three cohesive forces of Eastern Europe have disappeared: (i) atheistic elites (irrespectively from their ethnic, religious, social and linguistic background); (ii) antifascism; and (iii) Slavism. How to reinvigorate overall societal passions and drives for the enhancement of nation without unifying ideological narrative?

While the secularism of Atlantists increases the intellectual appeal of their indigenous ideology – that of neo-liberalism, trans-continentially; the newly discovered neo-clericalism of Eastern and Russophone Europe plays, not an emancipating, but a powerful self-restraining role. At home, it only polarizes, fragments and undermines vital social consensus, and for abroad it serves as a powerful self-deterrent.

Simply, beyond its narrow ethnic frames or national borders such *neo-religionism* motivates none to nothing. In the 21st century, dominated by the socially mobilized, secularized and knowledge-based nations across the world, *religionism* of East (static and rigid like its retrograde MENA sibling) only further alienates, isolates and marginalizes that region. It easily ends up in ethno-chauvinistic overtones that are not only isolating its proprietor, but also antagonizing or radically mobilizing its neighbors.

Globally, it means that while East remains entrenched in its 'newly discovered' *religionism*, only one ideology remains unchallenged and uncontested – that of Atlantist neo-liberalism.

Logically, East neither controls its own narrative nor (interpretation of) history: Due to a massive penetration of Central Europe, East grossly relativized, trivialized and silenced its own past and present anti-fascism. Additionally, this region does not effectively control its media space. Media there (of too-often dubious orientation and unspecified ownership) is distracting vital public debates: discouraging, disorienting and silencing any sense of national pride, influence over destiny direction and to its related calls for self-(re) assessment.

Today, Eastern Europe is not even sure, if its anti-fascism should be a question of choice or a matter of pure survival. Its mental de-territorialisation is corrosive and deep.

### **Pauperised masses – empowered lumpen proletariat**

In a combination with above, the speed and dimensions of criminal redistribution of national wealth and cruel pauperisation of masses (euphemistically called 'western style privatisation' of 1990s) deeply transformed the East, turning many into a re-feudalized society. By the end of Yeltsin's dizzy rule, even the biggest critics of the Soviet era were horrified by the post-Soviet destruction of Eastern Europe.

In 2000, much quoted Alexander Solzhenitsyn screamed out loudly: “Will we continue looting and destroying Russia until nothing is left? ... God forbid these ‘reforms’ should continue.” For that, he was of course, silenced and marginalized, and never quoted.

Indeed, as elsewhere in Eastern Europe, the severity, frequency and tempo of that social re-engineering via criminal redistribution of national wealth had no parallel historic example. Seems as if the region was left to choose between genocide (ex-YU) and its evil twin – social apartheid (elsewhere in the East)? Where were the famous dissidents from East? Why didn’t the academia of Eastern Europe debate about it?

And, while famous East intelligentsia remains mute, answers are streaming from the dominant narrative, that of West. Moreover, describing who these new elites of the East are, Western authors are breaking another Eastern taboo – quoting Karl Marx.

Number of quotation of Karl Marx in e.g. the *New York Times*, *FAM*, *the Economist*, *Wall Street Journal* or other Western neoliberal opinion-makers per annum is higher than all cumulative quotations of Karl Marx in Eastern Europe for the past two decades.

Thinkers of the East expelled Marx and Engels to (intellectual) Gulag indefinitely.

Hence, discussing the new emerging class on both sides of Atlantic (also *Useful Idiots* of Euro-Med theatre – a power-base of the so-called *Arab Spring*), Daniel Henninger does not hesitate to consider them a retrograde force of ‘lumpen proletariat’, outcasts turned professional dissidents, a fake class of ‘social scam’.

Writing in the *WSJ* (*Trumpen Proletariat*, July 06, 2016), to support his argument, he states: “Karl Marx, in a particularly dyspeptic moment, offered this description of what he dismissed as the lumpen proletariat: ‘Alongside decayed roués with dubious means of subsistence and of dubious origin, alongside ruined and adventurous offshoots of the bourgeoisie, were vagabonds, discharged soldiers, discharged jailbirds, escaped galley slaves, swindlers, mountebanks, lazzaroni, pickpockets, tricksters, gamblers, pimps, brothel keepers, porters, literati, organ grinders, ragpickers, knife grinders, tinkers, beggars—in short, the whole indefinite, disintegrated mass, thrown hither and thither, which the French call la bohème.’”

New elites of neo-feudalism?! European dream refeudalised ...



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# China's Policy toward Minorities in Xinjiang ( 1970 -1990)

Pooja Pingua\*

*[Xinjiang located in China's north-west and extends more than 1.6 million square km. The area represents about one-sixth of the Chinese territory and borders with eight Central Asian Countries. As an essential passage and hub for economic and cultural trade amongst Eastern and Western, Xinjiang turned into an essential area of the Silk Road.]*

After the death of Mao emerged a visionary and reformist leader, Deng Xiaoping, who started a damage control programme which was based on political reform and economic growth rather than ideological approach to policy making. He realised that the CCP under Mao had destroyed its position among non-Han people in Xinjiang and other minority areas. In a post-Mao era, CCP adopted some flexibility and brought liberalisation regarding state approach to the region. The CCP's policy of reformist period was started by Deng Xiaoping in the late 1970s and continued till late 1990s onwards.

## Minorities in China During 1970s-80s

During this period to reinforce the integration process, State endeavor was very strategic and flexible in contrast to Mao era towards China's ethnic minorities. This reform began through the de-collectivisation procedure of Chinese agricultural lands. Commune system was wiped out, and PRC embraced a globalized policy in the context of foreign and economic policy. The Gradualist approaches were adopted in the process of integration and assimilation of the ethnic minorities.

To begin with, process of change was started through the implementation of "household responsibility" where the people got the permission to restore their land. If there should be an occurrence of agricultural land, it was

decentralized to the farmers by production and sales taxes. Ethnic minority cadres were promoted in various authoritative positions in Xinjiang. Ethnic minority cultural and regional practices were allowed.

In the meantime, to inspire the political and socioeconomic growth of Xinjiang, China implemented distinctive plans since China was careful about Soviet intervention in Afghanistan and Soviet interest in Xinjiang. The Xinjiang Islamic Association was improved to conduct Islamic education, to build up the unity between Muslim and non-Muslims and to establish contact with outside nation.

Ethnic groups like Uyghur and Kazakh got the privilege to utilise their scripts after 1958. A lot of help package was assigned for economic development in Xinjiang. Agricultural and animal husbandry taxes were reduced. Xinjiang was linked by road and railway network with the rest of China. Be that as it may, the entire procedure was strategically stable to satisfy the Chinese goals of integration of Xinjiang with overall China and to control revival of minority ethnic, religious and cultural thoughts and practices.

After the displacement of the Great Leap Forward and Cultural Revolution periods, the reformist era revived the tolerance approach to minority culture and religious practices, which were followed until the first half of the 1950s. The ideological sense got less importance than practical approaches like to ensure and promote the economic development of minority nationalities in Xinjiang.

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The similar state of mind was highlighted in the foreign policy of China in the Central Eurasian Region during this period. Soviet Union's expansionist approach towards Afghanistan in 1978-79 was deemed as a threat to China's internal security in Xinjiang. So it was an emergency for Beijing to improve and stabilize the condition of Xinjiang. China's discernment in regard to the Soviet threat was not only based on the Soviet expansionist approach, but also on Soviet interest towards Xinjiang's ethnic, cultural and religious linkages between non-Han people in Xinjiang and people of Soviet Central Asia. So China reestablished its friendly relations with the USA.

USA's consideration was to combat the Soviet Union to prevent the latter from developing its regime in Afghanistan. The rounded profile visits started between China and USA, and both agreed to increase their arms sales, transfer of technology, joint intelligence operation and sharing. A few reviews reveal that Washington decided to form Mujahedeen (Clarke, 2007) by recruiting Muslim minorities and China helped the USA establish training camps in Xinjiang to combat Soviet forces in Afghanistan and to force the Soviet forces to go back to their homeland.

Amid this period, the non-assimilationist minority policies were re-established through the Nationalities Affairs Commission. The Chinese Islamic Association was revived. Ulanhu, who was the highest ranking non-Han in CCP, called for real autonomy in non-Han areas. Essentially, this was Zhou Enlai's thought against Han chauvinism and local nationalism, which was echoed by other leaders additionally in the reformist period. The dominance of Han cadres in Xinjiang leadership became the subject of criticism.

In 1982, the state constitution revived the financial rights of the local government in minority areas, and usage of resources and development of the local government was permitted. In 1982, the constitutions of the People's Republic of China (PRCs) accepted a

little planning, which declared that all nationalities are equal. Discrimination would be prohibited. In a case of language, religion, economy and cultural development, the constitution gave freedom to all nationalities.

The Constitution gave the control to self-governments of the autonomous region to administer their finances. The languages of the local area were permitted for official works. The minorities of Xinjiang got opportunities to decide their educational system, permission of more children, greater representation in public offices, worshipping and practicing their religion, etc. Since the mid-1980s, the minorities relished the real benefits of this legislation (Debata, 2007).

Deng Xiaoping's reformist policy afforded chances to the Muslim minorities to focus on their tradition and culture. Literary contributions and increasing contacts with outside world proved instrumental in enhancing awareness among the people of this area. In 1982, the CCP's policy towards religion began to keep up the adaptability in minority regions like Xinjiang, where religion was a fundamental component of social life.

Deng Xiaoping was interested in restoring and reinforcing native autonomy through increasing participation of non-Han people. On May 1984, a law was passed by CCP where minority nationality got right of local self-rule (Debata, 2007). A 'limit-building' program in the non-Han area was begun through adequate preparation and employment of minority people. Non-Han language got importance in local areas' administration.

Keeping in mind the end goal to assimilate non-Han people with Chinese culture, CCP focused on some key factors like the development of a common geographical characteristic within nationalities, promotion of a standard economic system and formation of a common culture. In 1984, Chinese Constitution gave the right to publish books, papers, articles as well as translated writings of the minorities. It suggested

protecting the scenic spot, historical sites and culture of the minorities.

From an economic point of view, per capita production and income got increased during this period. In 1991 after the disintegration of the Soviet Union, China had begun to rethink its minority policies. It conveyed the opportunity to China to improve its power in this area and additionally to balance out and handle the Xinjiang Uyghur Autonomous Region; China attempted to isolate this region from a turbulent environment of Central Asia.

In spite of the fact that they got autonomy in their culture, language, religion, yet the strict control of the center never gave the Uyghur people to keep up their framework. Culturally, they were assimilated with mainland China, which was an incredibly cautious step amid Deng's reformist period.

Clarke (2011) claims that the unrest started when basic approaches had entered in the student protest on 17-18 May 1989 in Urumqi. The circumstances changed into a riot. It was an upsurge of ethnic minority's sentiments which heightened against the CCP in the last half of the reformist period. The regional authorities with CCP's central leadership, raised their hands to stifle the demand for greater autonomy and declared that nobody was permitted to utilize religion to intrude the advance of the CCP's integrationist approach in regard to Xinjiang's ethnic minorities and the protest would mark a separate activity (Clarke, 2011).

Another school of thought (Gladney and Starr, 2004) claims that Xiaoping's reformist policy changed the economy, as well as made the way of state to deal with ethnic minority's issues. As of now, the state not just kept up adaptability to perceive the different request like a right to speech, right to language, right to religious belief, and so on of the ethnic minorities, however, indirectly insisted them to advance the status of separatist demand to attract the outsiders for help in Xinjiang.

Step by step expanding disappointment among ethnic minorities transformed into a violent movement in 1990 in the town of Baren.

China's minority policy from 1990s onward

The 1989-90 was an exciting time in the Xinjiang Uyghur Autonomous Region. The Tiananmen Square protest in 1989 and the disintegration of Soviet Union in 1991 were turning points for CCP's policies in Xinjiang. Increasing Sino-US pressure added other dimension to the entire problem. These occasions gave a new force to the call for the separate homeland in Xinjiang. The vital significance of Xinjiang, as well as the changed geopolitical situation in Central Asia, created a fear of domestic as well as an international threat to Chinese integrity and political stability.

So, CCP began to adopt a few policies in this country; the most important of that was – Strike Hard Campaign – to deal with domestic ethnic conflict in this area. Xinjiang's poor economic conditions prompted CCP to massive investment in this field since the 1980s onwards. Disappointment among Uyghurs and the demand for a separate state amid this time forced the CCP to have a careful approach. It increased development programs and efforts to combat ethnic-nationalist separatism.

CCP felt that an enhanced standard of living through a well-planned economic development can advance the Non-Han interests and appease them. With this per capita GDP in the area had increased 43 times in 2001, which was 166 Yuan in 1952. In 1990, Northern Xinjiang and in 1999, Kashgar and western Tarim Basin were connected to the national rail network. By the assistance of World Bank loans, road connectivity additionally improved amid the 1990s.

“One white, one black” strategy, what refers to cotton and oil, had become pillar of Xinjiang's economy from Deng's period and it became a single largest cotton producer in 1990s (Millward, 2004). Amid this time, old houses

were replaced by apartments, old style covered malls and shopping centers replaced bazaar, public sectors were commercialized and privatized.

The CCP introduced the Great Western Development Programme in Xinjiang, which has been one of the most important forms of economic development to decrease ethnic and separatist tensions in Xinjiang. CCP's current policies likewise permitted the minorities of Xinjiang, particularly Uyghur to travel outside country amid the 1990s. China established diplomatic relations with the countries of the Middle East and Central Asia. It extended its export of military equipment and began to purchase oil from Muslim Persian Gulf states.

Amid this period in 2001, after the 11th September, terrorist attack, China reinforced the war on terror strategy of U.S.A. It was a strategy to control the unrest of XUAR and to get back international support to suppress the demand and for autonomy by Uyghurs in this area (Clarke, 2003).

The 11th five-year plan (2006-10), issued by China government for its ethnic minorities, worried upon much progress of minority nationalities from public infrastructure, ecological environment to standard of living. The overall minority policy of Chinese Central government, as discussed above, has one single aim × to pacify the minority groups not to raise anti-Chinese voices and indulge in anti-Chinese activities. Minorities hold profound significance for China, from the strategic and economic sense, also the most critical security issues.

So following the Chinese standpoint, the Central government has been attempting to build rapport with the minorities. In any case, the Chinese authorities have not been entirely effective in bringing the Uyghurs and Tibetans to the Chinese fold. As has been seen in these two sensitive autonomous regions, violent separatist activities have happened at regular intervals. The primary causes of these anti-Chinese separatist activities

are apparent that they are not satisfied with the overall Chinese policy.

Since this research work deals exclusively with Xinjiang, it can be said that the Uyghurs are not content with the Chinese state policy towards the minorities, be it the move of Hans into the region, or the cultural system that consists of language and religious issues. Despite the fact that the Chinese make claims about all round economic development in Xinjiang, the Uyghurs eye it with doubt and blame the Chinese government of redirecting the assets of the area that has contributed much to the development of Hans and furthermore to the impoverishment of the effectively poor Uyghurs. The sentiments of marginalisation and alienation among the Uyghurs have brought about violent anti-Chinese activities.

In 1996, a few incidents took place in Xinjiang. Incidents of bombings in Kucha, uprisings and protests in Kashgar, Kucha, Aksu and other places in Xinjiang occurred as often as possible. The Uyghur leaders were assassinated (Guang, 2006). In March 1996, Standing Committee of CCP Politburo took some major steps in warning the minority people about their religious beliefs and practices.

The rise of Pan-Turkic and Islamic political parties and organisations in Uzbekistan, Turkistan, Kazakhstan, and Kyrgyzstan and the penetration and invasion of religious extremism emerged as a threat to the area. To combat the effects of the rising tide of ethnic nationalism from Central Asian Republics to Xinjiang, the CCP adopted some hard-line approaches towards its ethnic minority people in Xinjiang.

The declaration of the Strike-Hard Campaign in 1996 was one of the first devices about the reception of hard-line approaches towards Uyghurs. China additionally consented to some security cooperation agreements with Russia, Kazakhstan, Kyrgyzstan, Turkistan and Uzbekistan to diminish the tension of external threats amid this period.

## Conclusion

Chinese authority began development policies and programmes in Xinjiang. Keeping in mind the end goal to spread the integrationist approach into the ethnic minorities, CCP received a delicate approach during Deng's reformist period. It was characterised by relative tolerance towards the religious practices and customs of Muslim minorities and encouragement of institutionalised Islamic studies and culture through the construction of mosques and madrasas. These developments were controlled by the Chinese Islamic Association, a provincial group of CCP, to uplift the minority's culture, education and get political stability in Xinjiang.

In the latter half of reformist period, CCP adopted some hard policies, and those were continued in the 1990s onwards. At the point when the state came to understand Islam as a threat to the territorial integrity of China, particularly in Xinjiang, then it began campaigning against the Muslim literature, construction of mosques, re-education and reform of Muslim cadres. Strike Hard campaign was such a hard policy, to the point that had significantly affected the minorities in Xinjiang.

It was in 1983 that China launched Strike Hard as a national campaign to wipe out criminal activities from Chinese society. The Strike Hard campaign took different shapes in different times. In any case, if there should arise such an occurrence in Xinjiang it was utilised against the demand for autonomy or separatist movement, which China called × separatist activities. In the latter half of reformation period, CCP adopted some more hard policies, which continued in the 1990s onwards.

Some important factors insisted CCP to re-launch its Strike-Hard campaign in 1996. It incorporated the barren uprising in April 1990 that followed a progression of violent separatist attacks on Chinese interests in Xinjiang region, additionally in parts of China and prompted the Chinese authority to begin this campaign. Consequently, in March 1996, National People's

Congress adopted this law with more stringent measures. Extreme and quick punishments constituted the two fundamental objectives of this campaign. The legislation additionally permitted the provincial High Court to approve death sentences or lifetime imprisonment. In spite of the fact that it was a successful campaign, as indicated by Chinese authorities, China was criticised for the violation of human rights particularly in Xinjiang and Tibet.

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# Effects of Demonetization in India

Reshma S\*

*[Demonetization means that Reserve Bank of India has withdrawn the old ₹ 500 and ₹ 1000 notes as an official mode of payment. According to Investopedia, demonetization is the act of stripping a currency unit of its status as legal tender. Demonetization is essential whenever there is a change of national currency. The old unit of currency must be retired and replaced with a new currency unit.]*

The demonetization was done in an effort to stop the counterfeiting of the current banknotes alleged to be used for funding terrorism and for cracking down on black money in the country. Following the announcement by the Prime Minister on 8 November 2016, the Governor of the Reserve Bank of India (RBI), Urjit Patel made a press release with details on the procedure for exchanging the 500 and 1000 rupee notes that were then in circulation. This study mainly makes use of the secondary data which is collected from different newspapers and websites.

There are potentially two ways in which the pre-demonetization money supply will stand altered in the new regime: one, there would be agents in the economy who are holding cash which they cannot explain and hence they cannot deposit in the banking system. This part of the currency will be extinguished since it would not be replaced in any manner. Second, the government might choose to replace only a part of the currency which was in circulation as cash. In other words, the rest would be available only as electronic money. This could be a mechanism used to force a transition to cashless medium of exchange.

Demonetization is the act of detaching a currency unit of its status as legal tender. Demonetization is necessary whenever there is a change of national currency. It also helps to wipe out the black money and black market activities. The old unit of currency must be retired and replaced with

a new currency unit. The coins issued under the authority of Section 6 of The Coinage Act, 2011, shall be legal tender in payment or on account.

The demonetization was done in an effort to stop the count of terrorism and for cracking down on black money in the country, especially in the real estate world.

## Need For Demonetization

- The fake Indian currency notes in higher denomination have increased.
- To trace the unaccounted money, often used in any form of corruption or illicit deals, usually takes the form of high-value notes, which in this case are the Rs 500 and Rs 1,000 bills.
- The Financial Action Task Force, a global body that looks at the criminal use of the international financial system, notes that high-value bills are used in money laundering schemes, mugging, and drug and people trafficking; Comparison of high value bills across the world.
- To control the black activities in the real estate area.
- In India, until now the highest denomination note was Rs 1,000 and this was 1,000 times the smallest denomination note of Re 1 (Note: Re 1 notes are issued by the ministry of finance). When a currency has notes of higher denomination, it is easier to launder money i.e. store black money, as it takes less space and weighs less as well.

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## **The Positive Side of Demonetization**

The positive side of demonetization, *inter alia*, includes: deposits' increase for the banks and that means eventually interest rates might come down; curb on black money, corruption, and financing of terrorism etc; boost to cashless economy with people adopting habits of wallets and other e-banking technologies; and boost to *Jan Dhan* Account's relevance for the poor people.

It would be interesting to factor the surge in new account creation and activity in dormant accounts. Politics and various elections are known to run on cash. Same is the case with sectors such as real estate. Demonetization will likely result in making people adopt virtual wallets such as Paytm, Ola Money etc. This behavioural change could be a game changer for India. Government is also introducing schemes of discounts for digital transactions, e.g.: Fuel stations/Railway tickets/Life Insurance etc.

New launches are expected to dry up rapidly as realtors adopt a wait and watch approach and customers anticipate a further drop in housing prices. The situation will be aggravated as new approvals will be slow and builders will have to be more compliant with the Real Estate Regulatory Act (RERA) which comes into effect next year."The RERA will put a lot of unorganised players out of the market as they will not be able to start any project before they have all mandatory certificates with them. Moreover, approvals have been slow and input cost, including labour cost, is set to go up," said Razack.

## **The Negatives Side of Demonetization**

Public will face minor problem for a few days owing to the scarcity of lower denomination notes in the system. Everything else being equal, withdrawal of currency in circulation, in the short-run, might actually drive up interest rates. Short-term liquidity squeeze could be severe and hence economic activity could suffer. Supreme ruler credit rating possibly may have no impact;

but if there are short-term impacts on economic activity which dampens government revenues and widens deficit, you can expect a short-term decline in ratings.

Cost of printing the new currency (if high) would create another political rumpus along with immediate chaos and public mayhem, which will bring out potential issues of execution. There is need for a significant upgrade of the banking system as well as in the telecom infrastructure that would provide the backbone for digital transactions. For people to be able to transact at any time and place as well as for them to consider it a steadfast medium of exchange, it is important that not only the banking system is upgraded to ensure that transactions can be completed without a hold-up, but the supporting infrastructure too needs to be up to the mark.

## **Effects of Demonetization**

- 1. Effect on parallel economy:** The removal of old 500 and 1000 notes and replacement of the same with new 500 and 2000 rupee notes is expected to remove black money from the economy as they will be blocked since the owners will not be in a position to deposit the same in the banks, This will also temporarily stall the circulation of large volume of counterfeit currency and curb the funding for anti-social activities like smuggling, terrorism, espionage, etc.
- 2. Effect on Money Supply:** With the older 500 and 1000 rupee notes being scrapped, until the new 500 and 2000 rupee notes get widely circulated in the market, money supply is expected to reduce in the short run. To the extent that black money (which is not counterfeit) does not re-enter the system, reserve money and hence money supply will decrease permanently. However, gradually as the new notes get circulated in the market and the mismatch gets corrected, money supply will pick up.
- 3. Effect on Demand:** The overall demand is expected to be affected to an extent. The

demand in following areas is to be impacted particularly:

- Consumer goods
- Real Estate and Property
- Gold and luxury goods
- Automobiles (only to a certain limit)

All these sectors are expected to face certain moderation in demand from the consumer side, owing to the significant amount of cash transactions involved in these sectors.

**4. Effect on Prices:** Price level is expected to be lowered due to moderation from demand side. This demand driven fall in prices could be understood as follows:

- Consumer goods: Prices are expected to fall only marginally due to moderation in demand as use of cards and cheques would compensate for some purchases.
- **Real Estate and Property:** Prices in this sector are largely expected to fall, especially for sales of properties where major part of the transaction is cash based, rather than based on banks transfer or cheque transactions. In the medium term, however, the prices in this sector could regain some levels as developers rebalance their prices (probably charging more on cheque payment).

**5. Effect on various economic entities:** With cash transaction lowering in the short run, until the new notes are spread widely into circulation, certain sections of the society could face short term disruptions in facilitation of their transactions. These sections are:

- Agriculture and related sector
- Small traders
- SME
- Services Sector
- Households
- Political Parties

- Professionals like doctor, carpenter, utility service providers, etc.

- Retail outlets

**6. Effect on GDP:** The GDP formation could be impacted by this measure, with reduction in the consumption demand. However, during the festival season demand is expected to offset this fall in overall impact. Moreover, this expected impact on GDP may not be significant as some of this demand will only be deferred and re-enter the stream once the cash situation becomes normal.

**7. Effect on Banks:** As directed by the Government, the old 500 and 1000 rupee notes which now cease to be legal tender are to be deposited or exchanged in banks (subject to certain limits). This will automatically lead to more amounts being deposited in Savings and Current Account of commercial banks. This in turn will enhance the liquidity position of the banks, which can be utilized further for lending purposes. However, to the extent that households have held on to these funds for emergency purposes, there would be withdrawals at the second stage.

**8. Effect on Online Transactions and alternative modes of payment:** With cash transactions facing a reduction, alternative forms of payment will see a surge in demand. Digital transaction systems, E-wallets and apps, online transactions using E-banking, usage of Plastic money (Debit and Credit Cards), etc. will definitely see substantial increase in demand. This should eventually lead to strengthening of such systems and the infrastructure required.

### Conclusion

With a view to curbing financing of terrorism through the proceeds of Fake Indian Currency Notes (FICN) and use of such funds for subversive activities such as espionage, smuggling of arms, drugs and other contrabands into India, and for eliminating Black Money

which casts a long shadow of parallel economy on our real economy, it has been decided to cancel the legal tender character of the High Denomination bank notes of Rs.500 and Rs.1000 denominations issued by RBI till now.

The timing of the announcement has been somewhat of a surprise. The demonetization undertaken by the government is a large shock to the economy. The impact of the shock in the medium term is a function of how much of the currency will be replaced at the end of the replacement process and the extent to which currency in circulation is extinguished. While it has been argued that the cash that would be extinguished would be “black money” and hence, should be rightfully extinguished to set right the perverse incentive structure in the economy, this argument is based on impressions rather than on facts. While the facts are not available to anybody, it would be foolhardy to argue that this is the only possibility. As argued above, it is possible that these cash balances were used as a medium of exchange.

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# Affirmative action in India: Need to Retrospect

Dr. Afifa Aisha Rahmat\*

*[A policy means a course of action opted by a government to achieve certain desired objective. A public policy is a tool to achieve a desired state of society. Ambedkar wished an Indian society in which all Indians must be represented and reflected. He advocated the idea of protective discrimination for the under-privileged section of society to uplift them on a platform from where everyone can get equal opportunity. With due course of time this tool of affirmative action which was designed for eliminating discrimination from the society in time bound manner has turned into a political weapon which facilitates vote bank politics.]*

**R**ecent demands by various caste groups to be included in the reserved category highlights the unrest of society that may lead to a class conflict. A gap has been noticed between the intentions of constitution framers and the implementation of policy afterwards.

Now there is an urgent need of mid-course corrections for present reservation policy. In a just and fair society a person should not be denied benefits offered by government for having specific surname. There must be some rational and justified reasons to include or exclude an individual.

Time has come when government must retrospect its reservation policy, ensuring the social justice for every individual without compromising merit. State resources are limited and the target group is increasing day by day, Government must ensure the optimal use of resources on the basis of individual status and need without considering the caste or religion.

Reservations were introduced in India during the last decades of the 19th century when the sub-continent was divided according to two main forms of governance – British India and the more than 600 princely states. Some of these princely states were progressive and eager to modernize through the promotion of education and industrial

development and by maintaining unity among their own people. Mysore in south India and Baroda and Kolhapur in western India took considerable actions to uplift the minorities and deprived sections of society. The very first records of implementing reservations policies are from these princely states.

The objective of the Indian reservation system is to boost the opportunities for improved social and instructive position of the underprivileged communities and allow them to take their equitable place in the conventional Indian society. The reservation scheme exists to provide opportunities for the members of the SCs and STs to increase their representation in the State Legislatures, the executive branch of the Union and States, the educational institutions and other ‘public’ institutions.<sup>1</sup>

The goal of reservation in India has been to bring about an improvement in the welfare of who, historically, have been economically and socially depressed. The inception of the Indian Constitution in 1950 was a significant event which had incorporated the very concept of ‘social justice’ and ‘human rights’ and has opened up new avenues of human welfare and development in the Indian subcontinent by providing equal rights and privileges to the citizens at large.

The Constitution of independent India was not meant to serve only as a legal manuscript, it

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provides the guidelines for governance. It defines the functions of various key institutions as well as political actors—for the society as a whole and particularly for the underprivileged sections who were exploited in multiple ways over the centuries especially due to the prevailing dominant social order of Hindu society.

During the constitution-making process it was expected that the new Constitution would be effective enough to terminate the unending patterns of exploitation based on gender, caste and religion, and bring equality and justice for all so that one could live with dignity and possess equal civil rights. It was indeed the first moment in the lives of millions of people, particularly the depressed communities when they were likely to receive an equal treatment and entitlement after the adoption of new Constitution.

Gary Jeffrey Jacobson (2010) insists that a nation's Constitution is more than a written legal document as it also entails the fundamental norms and principles of a particular society. Despite the fact that the Constitution of India has borrowed several provisions from the varied Government of India Acts prepared by the Britishers during the colonial period, the Constitution reflects 'Indianess'.<sup>2</sup>

Dr. Bhim Rao Ambedkar, the Chief Architect of the Indian Constitution, prepared an appropriate draft offering a wide range of constitutional safeguards and guarantees to all citizens, for instance, socio-economic rights, civil liberties, freedom of religion, the abolition of untouchability and the prohibition of all forms of discrimination among others. He argued for extensive economic and social rights for the depressed classes. In addition to constitutional rights, he had also succeeded in introducing a system of reservations of jobs in the civil services, schools and colleges particularly for members of Scheduled Castes and Scheduled Tribes.

These measures are popularly known as the 'Policy of Inclusion' that makes endeavors to include the deprived and overlooked classes in

the society. In this way, Ambedkar was a valiant fighter for the cause of social justice and social equality, and thus known as the leader, liberator, hero, emancipator, representative of the voices of the socially overlooked classes.<sup>3</sup>

He has incorporated various provisions in the constitution for protecting the interests of the marginalized sections such as Articles 15 (4), 16 (4), 19(1) (d) and (e), 29 (2), 275, 330, 335 and 340, which are reflections of his conceptual understanding of social and economic justice. These Articles empower the state to make special provision for securing the interests of socially and educationally backward classes, i.e., Scheduled Castes and Scheduled Tribes. Articles 14, 15, 17<sup>4</sup> mentioned under the Part III are worth discussing in detail to comprehend the influence of Ambedkar's vision on the Indian Constitution.

Article 14 says that "the State shall not deny to any person equality before the laws or the equal protection of the laws within the territory of India. Article 15 prohibits the discrimination on the bases of religion, caste, race sex or place of birth. Article 17 is the most ground-breaking provision made in the Constitution which abolishes untouchability and outlaws its practices in any form. It is often considered as the provision which has significantly brought the social revolution in the deeply hierarchical and unequal India by criminalizing the practices of untouchability and arranging punishment in accordance with law for those who follow it.

India's Constitution of 1950 enshrined the idea of discrimination as a means to help both 'scheduled' groups, which was to build on limited quotas for jobs and education that were used in parts of British run India from the 1920s. Affirmative action, and the policy of reservations, has provided opportunities to those who are marginalized and historically, educationally and socially backward in the society. Affirmative action has produced significant results. However, there are some contradictions in the continuation of the policy- which actually affects the rights of other people in the concerned societies.

Regarding the reservation of jobs, Article 335 of the Constitution mandates that the “claims of the members of the Scheduled Castes and Scheduled Tribes shall be taken into consideration, consistently with the maintenance of efficiency of administration.” Ultimately a National Commission for Scheduled Castes and Scheduled Tribe was created to investigate, monitor, advice, and evaluate the progress of the Scheduled Castes and Scheduled Tribes under the schemes aimed at the socio-economic development of these groups.

But in arriving at this judgement about who should be eligible for reservation the criteria has been a person’s caste rather than his income or wealth. Consequently, groups belonging to article 115 of the Indian Constitution, called socially and educationally backward classes, have benefitted from reservation even though in practice many of these groups cannot be regarded as backward.

The nature of the reservation policy in India is more complex because of its societal structure. The under-representation of the identifiable groups is a legacy of the Indian caste system. After India gained independence, The Constitution laid down 15 per cent and 7.5 per cent of vacancies to government-aided educational institutes, and for jobs in the government or public sector, with the reserved quota for the SCs and STs Candidates respectively. Later, reservations were introduced for other sections as well. The Supreme Court ruling that reservations cannot exceed 50 per cent (which it judged would violate equal access guaranteed by the Constitution) has put a cap on reservations.

Pratap Bhanu Mehta advocates affirmative action but concludes that a policy focused on limited resources is bound to fail. The current system is not about equal opportunity, it is about distributing the spoils of state’s power strictly according to the caste thus perpetuating it. The Supreme Court, also noticed the issue while addressing the OBC in particular, it defined the concept of a creamy layer of the wealthiest and

most privileged among the OBCs, saying they must now be excluded from quotas, with the resultant discussion sparking not only which backward group deserve privileges, but over whom within the group should then be excluded.

Success of any policy can be gauged only on the basis of objectives and achievement within stipulated time framework. Time orientation is also very crucial.

One 2010 study of 16 of India’s biggest states did look at the effect on poverty in backward groups of their getting quotas of representatives, from 1960 to 2000. The report authors Aimee Chin and Nishith Prakash<sup>5</sup> concluded: for “scheduled tribes “who are conveniently crowded near one another on political maps, greater political clout has indeed led to a small drop in poverty but for the scheduled castes”, by contrast it has made absolutely no difference at all.

If government still wants to keep reservation policy then now it should not be based on caste or class, rather a comprehensive eligibility criterion should be evolved and more population must be accommodated on individual basis.

The policy of reservation is contrary to the principle of equality. It violates the very spirit of democracy. The quality of the workforce cannot be compromised with any ad-hoc policy which was deliberately designed for only ten years. It is creating some sort of frustrations among the other caste people as they are deprived of opportunities either to get a job or to take admission in any educational institution due to the reservation policy. The Policy actually has created a “new class of vested interest” in the society. The policy of reservation has given rise to the politics of casteism in Indian political system.

The over consciousness of caste identity is obstructing the process of national integration. Moreover, castes have been used as instruments for maintaining the vote banks of different

political parties. The caste-based reservation system only perpetuates the notion of caste in society, rather than weakening it as a factor of social consideration, as envisaged by the Constitution. Reservation is a tool to meet narrow political ends.

The course of action is on the way; however, proper government machinery may lead to the advancement of the deprived community on the proper and enhanced efforts in the future. The policy of reservation has never evaluated by a widespread social or political audit. Before extending reservation to more groups, the design and administration of entire policy needs to be properly examined, and its benefits spread over a span of nearly 68 years have to be gauged.

However, there are many contradictions on the implementation of reservation policies. Some arguments support reservations, while others rebut it. Reservations can be provided at a more comprehensive level taking into account various factors of exclusion such as caste, economic conditions, gender, as well as the kind of schooling received. A comprehensive scheme of affirmative action would be more beneficial than reservations in addressing concerns of social justice.

Reservation policy has undesirable side-effects and fails to achieve its goals in a time bound manner, hinders reconciliation, replaces old wrongs with new wrongs. It encourages different caste groups to identify themselves as disadvantaged groups. The arguments both in justification and also in criticism of the reservation have values. There is no immediate solution either in retaining or in terminating the policy of reservation. The Supreme Court also is in favor of retaining the policy. The decision that the “creamy layer” should be denied the benefit of reservation is a justified one. Otherwise, a section of the weaker class will get the benefit of reservations while the deprivation will continue for others. Time has come for the policy makers, to think over it.

The intentions of the framers of the Constitution were fair and cannot be questioned as they never tried to politicize the caste hierarchy of Indian social order, the constitutionalization of affirmative action was justified and time bound. B.R Ambedkar never supported caste-based politics but a strong advocate of equal rights for depressed class, it was the Mandal Commission that recommended reservation on the basis of socio-economic background but unfortunately caste as a group identity becomes the basic unit for reservation.

Now in India various caste and communities are trying to be enlisted in backward class to avail the benefits either violently or through pressure politics. Such developments in society create a discomfort in the society and may lead to a class/caste conflict that will be disastrous for Indian society. State resources are not proportionate with growing population. The optimal use of resources is the only option that will have justification in future rather than distribution of national resources on surname basis. This author is not against the protective discrimination policy for those who are depressed and confirms the basic criteria that must constitute the basis for eligibility, and at the same time opposes the politicization of this factor and its exploitation for petty political ends.

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# Women Empowerment in India

Dr.Geetamma.K\*

*[Empowerment is the process of enabling or authorizing individual to think, take action and control work in an autonomous way. It is the process by which one can gain control over one's destiny and the circumstances of one's lives. There are always a number of elements in the society which are deprived of their basic rights in every society, state and nation, but these elements lack in the awareness of their rights. If we enlist such elements from the society, then women would top this list. In fact, women are the most important factor of every society.]*

**E**ven though everybody is aware of this fact, but nobody is ready to accept this fact. As a result, the importance which used to be given to women is declining in today's society. Empowering women has become the focus of considerable discussion and attention all over the world. Today we enjoy the benefits of being citizens of a free nation, but we really need to think whether each of the citizens of our country is really free or enjoying freedom, in the true sense of the term.

The inequalities between men and women and discrimination against women are an age-old issue all over the world. The Constitution of our nation doesn't discriminate between men and women, but our society has deprived women of certain basic rights, which were bestowed upon them by our Constitution. Empowerment allows individuals to reach their full potential, to improve their political and social participation, and to believe in their own capabilities.

This paper analyses the awareness, significance and importance of education in women empowerment in India and offers some suggestions for women empowerment in India.

Women constitute almost half of the population in the world. But the hegemonic masculine ideology made them suffer a lot as they were denied equal opportunities in different parts of the world. The rise of feminist ideas has,

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however, led to the tremendous improvement of women's condition throughout the world in recent times. Access to education has been one of the most pressing demands of these women's rights movements. Women education in India has also been a major preoccupation of both the government and civil society as educated women can play a very important role in the development of the country<sup>1</sup>.

Present article discusses about various aspects such as history of women empowerment, importance of women empowerment, education as an important factor of women empowerment, political participation of women in various government schemes especially meant for women empowerment, constitutional provisions and some important suggestions.

## Meaning of Women Empowerment

Notion of women empowerment entails: increasing and improving the social, economic, political and legal strength of the women, to ensure equal-right to women, and to make them confident enough to claim their rights, such as: self-worth, respect, dignity, equal rights, participation in social, religious, public activities, opportunities without gender bias, comfortable working environment<sup>2</sup>.

## Definitions

1. H. Subrahmanyam (2011) compares women education in India at present and in the past by highlighting that there has been a good

progress in overall enrolment of girl students in schools. The term 'empower' means to give lawful power or authority to act. It is the process of acquiring some activities of women<sup>3</sup>.

2. Pt. Jawaharlal Nehru: "If you educate a man you educate an individual, however, if you educate a woman you educate a whole family. Women empowered means mother India empowered"<sup>4</sup>.

### Objectives of the Study

1. To know the Significance of Women Empowerment in India.
2. To assess the Awareness of Women Empowerment in India.
3. To know the Importance of education in women empowerment
4. To know the constitutional provisions and political participation of women in India
5. Suggestions and conclusion

**Statement of the Problem:** The development of society largely depends on empowerment of women in the country, Hence there is need to find out how we can empower the women by providing educational facilities, political participation, find out the problems related to women's empowerment in India.

### Research Methodology

The required information regarding empowerment of women in India has been collected by using the secondary source only.

### Importance of women empowerment

Swami Vivekananda says, "There is no chance of the welfare of the world unless the condition of women is improved. It is not possible for a bird to fly on one wing." Indian societies have received notoriety for being unsafe for women. In India, women are devalued traditionally and the men are normative reified. According to Hindu mythology, the word Ardhanarishvara means "The Lord whose half is a woman". We

must work all together and both need each other to survive and flourish."There is no substitute to women empowerment if we have to bring social equality in the country<sup>5</sup>.

1. **Equally competent and intelligent:** Women are equally competent. Nowadays, women are even ahead of men in many socio-economic activities.
2. **Talented:** Women are as talented as men. Previously, women were not allowed higher education like men and hence their talents were wasted. But nowadays, they are also allowed to go for higher studies and it encourages women to show their talents which will not only benefit them individually but to the whole world at large.
3. **Overall development of society:** The main advantage of 'Women Empowerment' is that there will be an overall development of the society. The money that women earn does not only help them and or their family, but it also helps develop the society.
4. **Economic Benefits:** Women Empowerment also leads to more economic benefits not to the individuals but to the society as well. Unlike earlier days when they stayed at home only and did only kitchen stuffs, nowadays, they roam outside and also earn money like the male members of the society. Women empowerment helps women to stand on their own legs, become independent and also to earn for their family which contributes to national economy.
5. **Reduction in domestic violence:** Women Empowerment leads to decrease in domestic violence. Uneducated women are at higher risk for domestic violence than educated women.
6. **Reduction in corruption:** Women empowerment helps women to get educated and know their rights and duties and hence can stop corruption.
7. **Reduce Poverty:** Women Empowerment also reduces poverty. Sometimes, the money

earned by the male member of the family is not sufficient to meet the demands of the family. The added earnings of women help the family to come out of poverty trap.

**8. National Development:** Women are increasingly participating in the national development process. They are making the nation proud by their outstanding performances almost every sphere including medical science, social service, engineering, etc.

### Importance of women education in India

Women education in India plays a very important role in the overall development of the country. It not only helps in the development of half of the human resources, but in improving the quality of life at home and outside. Educated women not only tend to promote education of their female children, but also can provide better guidance to all their children. Moreover, educated women can also help in the reduction of infant mortality rate and healthy growth of the population.

Thinkers have given a number of definitions of education but out of these definitions, the most important definition is that which was put forth by M. Phule. According to M. Phule, "Education is that which demonstrates the difference between what is good and what is evil". It is through education that one realizes what is good and what is bad, what is proper and what is not (just and unjust etc.).

It is education which gives a vent/ voice to injustice. The 3-fold formula which Dr. B. R. Ambedkar gave to Indian society includes the most important thing to be education. In other words, he has emphasized on education<sup>6</sup>.

**Table-1**

#### Literacy rate in India

Year	Persons	Males	Females
1901	5.3	9.8	0.7
1911	5.9	10.6	1.1

1921	7.2	12.2	1.8
1931	9.5	15.6	2.9
1941	16.1	24.9	7.3
1951	16.7	24.9	7.3
1961	24.0	34.4	13.0
1971	29.5	39.5	18.7
1981	36.2	46.9	24.8
1991	52.1	63.9	39.2
2001	65.38	76.0	54.0
2011	74.04	82.14	65.46

**Source: Census of India-2011<sup>7</sup>**

### Women Empowerment: In Present Scenario

Women empowerment and gender equality in India is an alarming issue. Some problems such as dowry, domestic violence, sex selective abortion, female infanticide are still prevalent. As per the 2011 Census, women are subject to disadvantages as compared to men in terms of literacy rates, labour participation rates and earnings.

The Census, 2011 reveals that the total literate population is 74.04% comprising 65.46% females and 82.14% males. As per report of UNDP, 2013 on Human Development Indicators, women constitute 48% of the population in world of which 29% is national work force and 26% women have access to format credit. It is witnessed that in software industry women enjoy equal wages and roles with men, but in other sectors women are mostly ill paid.

The percentage of IPC crimes committed against women has increased during the last 5 years from 9.25 in the year 2009 to 11.2% during the year 2013. A woman is raped once in every 10 minutes. Women perform about 2/3 of total hours, get 1/10<sup>th</sup> of the world's income and own less than 1/100<sup>th</sup> of the world resources.

Women occupied only 10% seats in World Parliament and 6% seats in National Cabinet.

India is ranked as the 135<sup>th</sup> country in the World in imparting free and compulsory education between the age group of 6 to 14 years (Right to Education, 2010). In Indian society, preference is still continuing for a son over the birth of a girl and biased attitude of the parents is seen in favour of male child in respect of education, nutrition and other opportunities.

### **Constitutional Provisions for Empowering Women in India**

1. Equality before law for all persons (Article-14).
2. Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth (Article 15(I)).
3. However, special provisions may be made by the state in favours of women and children Article 15(3).
4. Equality of opportunity for all citizens relating to employment or appointment to any office under the state (Article 16).
5. State policy to be directed to securing for men and women equally the right to an adequate means of livelihood (Article 39(a); (v) equal pay for equal work for both men and women (Article 39(d)).
6. Provisions to be made by the state for securing just and humane conditions of work and maternity relief (Article 42).
7. Promotion of harmony by every citizen of India and renouncement of such practices which are derogatory to the dignity of women Article 51A(e).
8. Reservation of not less than one-third of total seats for women in direct election to local bodies, viz. Panchayats and Municipalities (Articles 343(d) and 343 (T)8.

### **Women empowerment schemes**

- JananiSuraksha scheme
- Integrated Child Protection Scheme

- Swadhar-A scheme for Women in Difficult Circumstances
- Ujjawala-A Scheme for Prevention of Trafficking and Rescue, Rehabilitation and Reintegration
- National Rural Health Mission<sup>9</sup>

### **Suggestions**

- Women education: By educating women, economy of the country increases. It has been seen from the last few decades that involvement of educated women in various activities helps the country to move towards economic and social development.
- Female education also contributes towards health and well-being of the family.
- By getting education, women also contribute to the national income of the country.

- Educated women are considered active in politics as well.
- They know their rights and are able to defend themselves better.

**1. Create safe workplaces:** Women can be empowered through the creation of safe working environment. The workplaces should be safe for the female members of the society. People will like to send their daughters and wives to work if they are assured of safe environment at workplaces.

**2. Raise voice against gender inequality:** Women can be empowered by decreasing the gender inequalities or disparities in all sectors of the society especially in education sectors.

**3. Job skills (Vocational training):** Proper training should be provided to women's for better results.

**4. Create more part-time job opportunities:** There should be greater number of part-time job opportunities. In India, mostly women are housewives so they do not get any opportunity for full-time

work. Hence, more part-time and flexible jobs should be created so that more and more women get engaged into commercial activities.

### Conclusion

Women play an important role in making a nation progressive and guide it towards development. They are essential possessions of a lively humanity required for national improvement, so if we have to see a bright future of women in our country, giving education to them must be a pre-requisite. Education of women is the most powerful tool to change the position of society and education also brings a reduction in inequalities. Similarly, political participation of women is also very important and still we have to create awareness about government schemes which are specially meant for women's empowerment in India.

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# Water Resource Management in India

Dr. Vikramsingh\*

*[Water is useful for us in many ways, making our lives easier and more enjoyable. But we must take great care not to overuse and abuse this precious resource. Water is a basic necessity of life, not only for people but for every type of plant and animal as well.]*

**W**ater accounts for about 65 percent of our body weight. If we lost as little as 12 percent of it, we would soon die. Water is essential not only for survival but also contributes immeasurably to the quality of our lives. Since the dawn of time, human beings have harnessed water to improve their lives. In some ways, the history of civilization is the story of how we have made water work for us in ever more ingenious ways. As early as 5000 B.C., our predecessors used irrigation to increase crop production. Archaeologists have found masonry sewers dating back to 2750 B.C.

97.3 per cent of water is locked up in the oceans as sea water, and another 2.1 per cent in ice caps and glaciers. Freshwater, essential for sustenance of terrestrial life (plants, animals, and humans) constitutes about 0.6 percent of the total water inventory. A bulk of this freshwater occurs as ground water and as soil water, which can be extracted only by plants. Freshwater in lakes streams and the atmosphere constitutes less than 0.05 percent of all water on the Earth.

Of the total water usage, 92 per cent is by Agriculture, 5 per cent for Domestic use, and remaining 3 per cent is for Industrial use. The overall water demand is supposed to increase by 2025, and currently average urban water usage is 135lit/person/day. Demand from the industrial and domestic sectors is expected to increase with the growing population, urbanization and industrialization.

86 per cent of population has access to improved water use, only 33percent of population has access to improved sanitation. Hence, after knowing the importance and availability of water resources, it becomes most important to find out solutions and optimal management of water resource.

## Reviews

1. The World Health Organization estimates that 97 million Indians lack access to safe water today, second only to China. As a result, the World Bank estimates that 21% of communicable diseases in India are related to unsafe water. Without change, the problem may get worse as India is projected to grow significantly in the coming decades and overtake China by 2028 to become the world's most populous country.
2. Dr.Parikh, chairman of Integrated Research and Action for Development (IRADe) and a former member of the Government of India's Planning Commission in-charge of water and energy issues, argues that the country's water crisis has been caused by a combination of factors, including population growth, dwindling groundwater supplies from over-extraction by farmers, and insufficient investment in treatment facilities at the federal, state, and local levels.

## Objectives

1. To know water resources in India
2. To analyze the reasons for water crisis

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3. To know water management in pre-colonial India and Independent India
4. Suggestions and water management techniques

### Statement of the problem

Water touches every aspect of life, and in India uncertainty over access to and the availability of this basic resource may be reaching crisis levels. As India continues to undergo dramatic shifts caused by a growing economy and population, competing demands for this limited resource coming from households, industry, and agriculture have wide-ranging implications for the country's future. Hence, there is a need of optimal management of this precious resource.

### Methodology

The data is collected with the help of secondary sources such as Books, Internet, Journals, Magazines, Newspapers, Government orders, etc

### What is Water Crisis

Did you know that only 2.5 Percent of all the water in the world is fresh water? And that only

1 per cent is accessible, by accessible I mean trapped in glaciers and snow fields. We only have real access to 0.0007 per cent of the planet's water, that's all we have to feed and fuel over 6.8 billion people. Lack of clean water is a plague which affects 1.8 billion people every year.

A water crisis is when there is not enough potable water for a population, which in turn leads to drought, famine and death. Today safe drinking water has become a luxury for people living in drought hit regions and African subcontinent. People can be seen walking miles and spending entire day searching for it. Even if they get it, they have to fight with the water borne diseases arising from it.

Economic development suffers when basic necessities are not met and people have to struggle hard for them. Still, people take it for granted and do not understand the importance of water conservation. It seems pertinent to have a brief overview of some of the causes, effects and possible solutions for the water crisis.

**Table: 1**

**Water availability per person in 1995 in different regions of the world and how much is likely to be available in 2025**

Regions of world	Water available in 1995(Per person per year in million litres)	Water likely to be available in 2025 (Per person per year in millions of litres)
Africa	5.53	2.46
North & Central America	16.60	12.50
South America	37.00	24.10
Asia	3.60	2.35
Europe	3.96	3.92

Source: UNESCO, managing water resource

**Table: 2**

**Usage of Water per person per day in different parts of the world**

Part of World	Water used (Per person per day)
North America	300 litres
Europe	150 litres
Developing countries	50 litres

Source: UNESCO, managing water resource

### **Causes of water crisis in India**

India's water crisis is rooted in three causes. The first is insufficient water per person as a result of population growth. The total amount of usable water has been estimated to be between 700 to 1,200 billion cubic meters (bcm). With a population of 1.2 billion according to the 2011 census, India has only 1,000 cubic meters of water per person, even using the higher estimate. A country is considered water-stressed if it has less than 1,700 cubic meters per person per year. For comparison, India had between 3,000 and 4,000 cubic meters per person in 1951, whereas the United States has nearly 8,000 cubic meters per person today.

The second cause is poor water quality resulting from insufficient and delayed investment in urban water-treatment facilities. Water in most rivers in India is largely not fit for drinking, and in many stretches not even fit for bathing. Despite the Ganga Action Plan, which was launched in 1984 to clean up the Ganges River in 25 years, much of the river remains polluted with a high coli form count at many places. The facilities created are also not properly maintained because adequate fees are not charged for the service.

The third problem is dwindling groundwater supplies due to over-extraction by farmers. This is because groundwater is an open-access resource and anyone can pump water from under his or her own land. Given how highly fragmented land ownership is in India, with millions of farmers and an average farm size of less than two hectares, the tragedy of the commons is inevitable. India extracted 251 bcm of groundwater in 2010, whereas the United States extracted only 112 bcm. Further, India's rate of extraction has been steadily growing from a base of 90 bcm in 1980, while this rate in the United States has remained at more or less the same level since 1980.

1. Rising demands of increasing population
2. Over extraction of easily available surface and groundwater resources

3. Increasing human impact on the environment and contamination of available water sources
4. Changing climate

### **Definition**

Water Management is the management of water resources under set policies and regulations. Water, once an abundant natural resource, is becoming a more valuable commodity due to droughts and overuse.

### **Water Budget**

Water Budget means – the balance between the available water in the country and the water under use. There is a great variation in the distribution of water resources in space and time. Water is available in sufficient quantity during rainy season. As the dry season sets in, there is a shortage of water. The reserves of our surface and underground water are about 23840 billion cubic metres. Out of this only 10860 billion cubic metre water is required for use.

The unit of measurement of amount of water is cubic metre or hectare metre. If water standing one metre deep on a perfectly level area of one square metre, then the total volume of whole of that water would be one cubic metre. In the same way, if water standing one metre deep on a perfectly level area of one hectare then the total volume of water would be one hectare metre

### **Water management in pre-colonial India**

Before the advent of British colonial rule, investments in water development and management were made in different parts of India. Evidences of this could be found in ancient texts, inscriptions, local traditions and in archaeological remains. Even the Puranas, Mahabharata, Ramayana and various other Vedic, Buddhist and Jain texts mention about numerous canals, wells, tanks and embankments (Agarwal and Narain, 1997).

Moreover ancient religious texts, commentaries and stone inscriptions provide references of governing principles such as ethical, moral,

spiritual, social and ecological which were applied to water management during pre-colonial Hindu and Muslim rule in India (Vani, 2009).

The *Arthashastra*, one of the ancient historical canons written by Kautilya in the 3rd century B.C, gives a clear account of water management in the Mauryan Empire. It states that the local communities were very well aware about the rainfall regimes, soil varieties, and irrigation techniques in the specific micro-ecological context. Furthermore, *Arthashastra* mentions that state rendered help, support and promoted the small water harvesting structures (Agarwal and Narain, 1997).

In the traditional India, irrigation/ water structures of all types were built by the order of the kings. Indian kings encouraged the activity by giving grants like revenue free lands to nobles, ordinary people and even temples to construct (Agarwal and Narain, 1997) tanks, for seeking agricultural prosperity and to increase the state revenue.

The villagers made their own institutions for the construction, maintenance and for operation of the tanks as a common property resource (Bottrall, 1992). Often the tanks were built in a chronological manner, with smaller systems at the upstream of a catchment and moving with increasing-size towards downstream. Each successive tank was built in a chain manner and height of each was calculated by keeping and respecting the rights of upstream and downstream users, thus it was a way of regulating the amount of the catchment runoff and how much should flow on to others.

In water-managed agriculture, wells played an important role by supplementing the surface water irrigation systems in the Northern and Western India. Open-lined and unlined wells were used for domestic water needs and also for complementing irrigation needs, about which the evidence in the Vedic literature is available.

It was the Satwahanasin in the ancient India who introduced the ring wells – dug wells for irrigation use (Shah, 2009). Whereas privately

owned open wells operated manually or powered animals in the high water table areas of the Upper Gangetic Basin (Whitcombe, 1972).

During the Mughal period some large-scale canal constructions were undertaken but its contribution to irrigated agriculture was relatively irrelevant (Habib, 1982) and irrigation through wells was far more important at that time (Habib, 1970). The productivity enhancing potential of well-irrigation was quite acknowledged in the revenue calculus of ancient and medieval rulers and therefore well - construction was encouraged through incentives and tax remissions.

From the time of *Arthashastra* (third century B.C) to the Mughal rule during the sixteenth to eighteenth centuries A.D and later on even during the colonial era, lands irrigated with wells were assessed at a higher rate than the rain-fed lands (Hardiman, 1998). While in the flood prone Eastern Gangetic Plains, agriculture was largely rain-fed.

### **Water management in independent India**

India attained its independence from the British rule in August 1947. With independence came partition of India and loss of large productive irrigated lands to Pakistan; and bulk of the public irrigation networks that British had created ended up in Pakistan (Shah, 2009). Government of India's main aim after independence was to accelerate development and address the regional disparity of investment, as it was facing serious food grains shortage and rapid rates of population increase. The slow pace of irrigation development during the last decades of colonial regime had also aggravated the current problematic situation of food shortage.

### **Suggestions and Techniques**

1. The central and state governments should empower local groups with knowledge, understanding, and real-time information on the status of groundwater so as to manage extraction in a cooperative way. Since groundwater is an open resource, farmers

extract as much as they can. But when everyone does this, it leads to extraction above a sustainable level. This problem can only be managed by a cooperative agreement among the users of the aquifer, who should know how much can be extracted without depleting the resource.

2. India needs to promote watershed development. The example of the state of Gujarat, as well as the efforts of Rajendra Singh and Anna Hazare, have shown that this approach is effective and profitable. Moreover, it can be undertaken at the local level all over the country and can be accomplished in a relatively short time.
3. India must educate people about the need for dams to store water. The environmentalists and other groups who oppose dams should be engaged in a dialogue to work out alternatives and build a consensus.

### **Rain water harvesting**

Rainwater harvesting is the capture, diversion and storage of rainwater for a number of different purposes including, but not limited to, landscape irrigation. Rainwater harvesting may also include land-based systems with man-made landscape features to channel and concentrate rainwater in either storage basins or planted areas. Even in ancient days, people were familiar with the methods of conservation of rainwater and had practiced them with success.

### **Watershed management**

Watershed is the unit of management in Integrated Water Resources Management where surface water and groundwater are inextricably linked and related to land use and management. Watershed management aims to establish a workable and efficient framework for integrated use, regulation and development of land and water resources in a watershed for socio-economic growth. Local communities play a central role in the planning, implementation and funding of activities within participatory watershed development programmes. In these

initiatives, people use their traditional knowledge, available resources, imagination and creativity to develop watershed and implement community centered programme.

### **Meter/Measure/Manage**

Metering and measuring facility of water use help to analyze saving opportunities. This also assures the equipment is run correctly and maintained properly to help prevent water waste from leaks or malfunctioning mechanical equipment.

### **Use Water-Smart Landscaping and Irrigation**

Planting native and drought-tolerant plant species minimizes the need for supplemental irrigation. Landscape water use can also be reduced 10 to 20 per cent by having an irrigation water audit.

### **Conclusion**

Efficient water management strategies and techniques; Awareness in people regarding water management. Improved water treatment technologies and access to good sanitation and drinking water. Rainwater harvesting (capture and store rainfall and use if efficiently). Water and environmental related training to be offered at the college and university students.

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## Good Samaritan Compassions in Karnataka

Chandrashekar.S.V\*

*[The humanitarian views are global thoughts and nature of humanitarian principles is the fundamental foundation for every democratic norm, values, and public interests. The democratic values are measured not only by setting the norms, but in following the same. Based on these deliberations, the norms of the nation and responsibility of the public should work in the sustainable mode. This will prove actual thoughts of humanitarian principles by all means of societal needs. The prime objectives in the humanitarian principles pertain to the practice of protecting the lives as well as their sufferings.]*

**H**umanitarian views are also called as emergency response to the causes like natural disasters, road accidents and crime victimization. State's duty is to ensure public safety and protection of its citizens in equal respects. In India, there are some issues that still need to be enlightened by the entire citizens in their minds pertaining to cause of crime victimization. Good Samaritan and the

concepts of Good Samaritan laws are formed to help the victims injured or in dangerous condition. Supreme Court of India made it clear officially to those who save the lives of the victims that there are exceptional interventions by the court, hospital and police.

### **Humanitarian Doctrine, Good Samaritan and Public advocacy**

The underlying doctrine of Good Samaritan law is to protect liability of the civilians, it boosts

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the civilians to save the lives of the victims of road accidents without viewing their negligence and makes them to voluntarily participate in the rescue. It also encourages assisting without any hesitations, liability made in the assistance. The rescue act is performed as the basic needy responsibility, being citizen of the country. Saving a life, serving as civilian etc, are the basic concepts in the humanitarian views.

Public advocacy is the concept of every citizen of a particular nation to serve the nation for its welfare and to uplift the nationalism. As state assures the rights to the citizen, same way the state also expects its citizen in certain issues relating to the social contemplations. Public advocacy is voluntary participation of the citizen.

### **Good Samaritan law in India**

The Supreme Court of India, made it clear in guidelines of saving lives of road accident victims. Now it has cleared way for the bystanders to help the road accident victims. This is the first time in India through a policy and guidelines to the government of India to form a law to help the victims. It is the fulfillment of the system and the procedural conflicts between the bystanders and the criminal justice.

The Law Commission of India in its 201st report also stressed on the patients' treatment. It also assured that the hospital or medical practitioner shall provide emergency care to the victims of the accidents or those who are in emergency medical condition, in medico –legal cases, if they refuse treatment then that will be an offensive. This emergency period is mentioned as Golden Hour, the first hour of the incident, where emergency treatment is needed.

Whenever the victims are brought for medical treatment, the treatment should start instantaneously in the aid of saving life and

criminal law should be allowed to operate in order to avoid negligent death. It is not only for the bystanders but also for the police, medical officers. The Union government has instructed all the states to follow the Supreme Court rule and to establish the law of Good Samaritan.

### **Apex Court's Judgment**

It was a writ petition filed by the Save Life Foundation & Anr versus Union of India & Anr , on the article 32 of the Constitution of India in the public interest for the development of supportive legal framework to protect Samaritans by bystanders and passer-bys. It is a duty in order to save life of the people. The department of road transport is responsible for framing motor vehicle legislation and evolving road safety standards in India.

The WHO in its world report on road traffic injury prevention, 2004 has projected that by 2020 road accidents will be one of the biggest killers in India. It has also emphasized that in low income countries such incidents are likely to increase.

### **The Gazette of India**

The Gazette of India dated the 12th May 2015 reports that Honorable Supreme Court in the case of Save Life Foundation vs. the Union of India, orders the Government of India to issue the necessary directions to protect the good Samaritans from harassment on the actions being taken by them to save the life of the road accident victims and therefore the central government issues the guidelines to be followed by hospitals, police and all the authorities for the protection of good Samaritan.

1. A bystander or Good Samaritan, including an eye witness of the accidents, may take an injured person to the nearest hospital and the bystander or Good Samaritan should be

allowed to leave immediately. Except after furnishing address by the eyewitness only, no question shall be asked from such bystander or Good Samaritan.

2. The bystander or Good Samaritan shall be suitably rewarded or compensated to encourage other citizens to come forward to help the road accident victims by the authorities in the manner as may be specified by the State Governments.
3. The bystander or Good Samaritan shall not be liable for any civil and criminal liability.
4. A Bystander or Good Samaritan, who makes a phone call to inform the police or emergency services for the person lying injured on the road, shall not be compelled to reveal his name and personal details on the phone or in person.
5. The disclosure of the personal information, such as name and the contact details of the Good Samaritan shall be made voluntary and optional including in the medico-legal case form provided by hospitals.
6. The disciplinary or departmental action shall be initiated by the government concerned against public officials who coerce or intimidate a bystander or Good Samaritan for revealing his name or personal details.
7. In case a bystander or Good Samaritan, who has voluntarily stated that he is also an eye witness to the accident and is required to be examined for the purposes of investigation by the police or during the trial, such bystander or Good Samaritan shall be examined on a single occasion and the state government shall develop standard operating procedures to ensure that the bystander or Good Samaritan is not harassed or Intimidated.

### **Government of Karnataka efforts**

Government of Karnataka's initiation has been more profound in the recent times because of its achievement by setting a new milestone in the creation of Law called HARISH SANTHWANA. It is the form of Good Samaritan law in Karnataka which was established on the grounds of humanitarian principles. The law was supposed to be called as SANTHWANA; it's a form of compensatory money scheme through the Chief Minister.

This is ideal form of establishment through the government in order to protect the lives of road accident victims. This SANTHWANA scheme merely used, after the incident of Harish, a security guard died in the road accident near heavy traffic road of Nelamangala, Bengaluru, a truck ran over his body, which was cut into two halves. But the conscious level of Harish was so strong, he was bleeding severely. Public was shocked and no one dared to see such condition with naked eyes.

By standers were unable to do anything by seeing such incident and this made Harish to pass away. Before his death, his half cut body was responding to the inhumanly moving traffic to pass aside by showing his own hand and requesting. And also he shouted towards public to donate his organs. Such a tragic moment made everyone to be human. The government then initiated this law and to protect those who react in the protection of victims shall deem to be exception in the later consequences of procedures with hospital, Police and with witness.

Instantaneous Response: This is a facility of 104 bike ambulance and 108 four-wheeler ambulance for immediate response of these kinds of emergency needs. These ambulances are multi-facilitated vehicle with first-aid and the medical servants.

## Medical Treatment Facilities

1. All the government hospitals at Taluk, district levels, community health centers and in all the Primary Health Centers shall respond.
2. All the Medical Colleges including private and Government across the state.
3. All the private hospitals across the state, having emergency and intensive care units.
4. Government certified and approved all the hospitals, both the private and governmental, are under Global Positioning System (GPS), that makes it easy to find out the nearby hospital with the help of maps and routes.

## Specific characteristics of this scheme

1. First time in Karnataka state.
2. The victims of the road accident within the geographical area of the state are eligible.
3. Within 48 hours of the incident, 25000 rupees worth of the cashless treatment including ICU.
4. Certified hospitals are made responsible for quality treatment.
5. Government will pay the fee by the SUVARNA AAROGHYA SURAKSHA TRUST.
6. Public is encouraged to join their hands with the 104 and 108 ambulances.
7. This scheme is introduced by the programs of Health and family welfare and also with the Suvarna Aaroghya Suraksha trust of the government.

Rajasthan is another state, which has the same idea of establishing law relating to these issues in future developments. Now the whole India should adopt this concept on the grounds of humanitarian principle. Public shall also be active in the government initiations.

## Conclusion

The Good Samaritan law is having the nature of the doctrine of rescue and the duty of the citizen within its formulation, the other way it is initiation to the public for their advocacy in saving the life of the victims who are in emergency need. Karnataka state is the first state to show its concern to adopt this law. The other states are also working in order to make execution of this law for their better assurance to the public. Rajasthan is the other state which is working towards enactment of this law. It is a better radical change in the field of law and criminal justice that the possible measures can be taken in order to save life. One can hope that public advocacy will hopefully keep the momentum in the future.

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# Application of Bio-Fertilizers

Dr.T.Vijayalakshmi\*

*[Bio-fertilizers are defined as preparations containing living cells or latent cells of efficient strains of microorganisms that help crop plants' uptake of nutrient by their interactions in the rhizosphere when applied through seed or soil. In the strict sense, bio-fertilizers are cultures of micro organisms like bacteria and fungi packed in a carrier material. Thus the critical input is the micro organism.]*

**T**he production and use of Bio-fertilizers is proposed to improve yield of crops by using root nodule bacteria (rhizobia), mycorrhizal fungi and other micro organisms that are able to increase availability of plant nutrients from the soils. For this purpose, the most effective microorganisms for each specific crop will be identified, for example by measuring N<sub>2</sub> fixation activity by using nitrogen-15 isotope as tracer and using other methods too.

Ionizing radiation is used to sterilize the carriers of the rhizobia and other bio-fertilizer to microorganisms. These microorganisms are selected by pot and field experiments, cultured and packed with carrier materials and provided commercially for the agricultural crops and reclamation of forest and devastated lands. Quality control is extremely important, especially for the population of infected effective microbes and other contaminants, which may often give adverse effects.

## Statement of the Problem

Bio-fertilizers can continuously generate nutrients, thereby, minimizing the input of costly and polluting chemical fertilizers. The bio-fertilizers currently in use are largely those capable of providing additional supplies of nitrogen through biological nitrogen fixation like rhizobium, Azoto-bactor, blue green algae, Azolla etc. They should be used particularly in

combination with crop rotations and application of chemical fertilizers and organic manure. They help the plants indirectly through better Nitrogen (N) fixation or improving the nutrient availability in the soil.

## Objectives

- To identify the motivational factors influencing the purchase of bio-fertilizers
- To study the satisfaction level of the farmers on the application of bio-fertilizers
- To compare the extent of application of different bio-fertilizers
- To know the more suitable advertisement media for the sale of additional volume of bio-fertilizers
- To analyze the factors responsible for the purchase of bio-fertilizers

## Methods and Materials

In order to attain the objectives, data were collected from the farmers of Kuravapulam village at Vedaranyam Taluk through a well-designed interview schedule by direct personal interview method. The sample size is 50 chosen by lottery method. The reference period for the present study covers one year viz. January to December 2016. The materials and related literature were collected from books, journals, newspapers and websites.

## Profile of the Study Area

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Kuravapulam is a village in vedaranyam Taluk in Nagapattinam District of Tamil Nadu state in India. It is located at 45 Km away from District headquarters Nagapattinam; 9 Km away from Vedaranyam and 346 Km away from Chennai. The village is surrounded by Thalainayar Taluk towards North, Thiruthuraipoondi Taluk towards west, Kottur Taluk towards east and muthupet Taluk towards south. It is near the Bay of Bengal and there is a chance of humidity in weather. Nagapattinam, Velanganni, Thiruvarur, Nagore are the nearest tourist centers.

## Results and Discussion

### Age group

A majority of 36% of the sample farmers is under the age group of 40 to 50 years; A few 5% of sample farmers belong to the age group of 20 to 30 years.

### Educational Status

14% of the sample farmers were illiterates due to poor economic background. 56% of sample farmers have primary education; 17% studied up to secondary level; 5% of the respondents have

H.Sc. qualification. 8% of the sample were graduates.

### Size of land holding

52% of sample farmers have less than 5 acres of land. 41% of them have 5 to 10 acres of land. 7% have 10 to 15 acres of land.

### Type of land

50% of the sample farmers have current fallow land; 21% of them have cultivable land and 19% of them have other fallow land.

### Source of awareness

30% of the sample farmers got awareness about bio-fertilizers from friends and relatives. 20% of them from company representatives and 18% of respondents got awareness from promotional programs; 18% of them from agricultural office; and the remaining 14% got awareness from dealer's advice.

### Type of bio-fertilizer

More than half of the sample (56%) use 'FACT' brand of bio-fertilizer; Out of the 56% 44% use 'T-Stanes'.

**TABLE NO:1**

### Motivating factors and attitude about the effectiveness

S.No	Features			% of respondents	
1	Brand	FACT		56%	
			Quantity of Purchase	Less than 10kg 10 to 20 kg	51% 49%
		T-Stanes		44%	
			Quantity of Purchase	Less than 10kg 10 to 20 kg	58% 42%
2	Motivating factors	Packaging		32%	
		Brand image		24%	
		Promotion activities		24%	
		Dealer's advice		20%	
3	Attitude about effectiveness	Highly Satisfied		66%	
		Satisfied		20%	
		Neutral		14%	

4	No of times of purchase per year	Once	42%
		Twice	24%
		Three times	34%

**TABLE NO:2**

**Opinion about bio-fertilizer**

<i>S.No</i>	<i>Opinion</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>
1	Enhances plant growth	63%	26%	11%
2	Increases yield	57%	30%	13%
3	Maintains soil fertility	46%	25%	29%
4	Saves cost	44%	32%	24%
5	Eco-friendly nature	79%	20%	01%
6	Good root formation	53%	35%	12%
7	Improves soil fertility	52%	40%	08%

The above table indicates the opinion of the sample farmers about bio-fertilizers. A majority of 63% of them strongly agreed that the bio-fertilizers enhance plant growth; 57% strongly

agreed that there is increase in yield due to the use of bio-fertilizers; 79% strongly agreed that the bio-fertilizers are eco-friendly in nature and so on.

**TABLE NO:3**

**Factors responsible for the purchase of bio-fertilizers**

<i>S.No</i>	<i>Factors responsible</i>	<i>Highly Satisfied</i>	<i>Satisfied</i>	<i>Neutral</i>
1	Price	40%	42%	18%
2	Effectiveness	55%	24%	21%
3	Quality	47%	34%	19%
4	Brand	60%	27%	13%
5	Dealer's advice	39%	27%	34%
6	Eco-friendly nature	62%	36%	02%
7	Good facility	41%	23%	36%
8	Package	34%	20%	46%
9	Brand image	40%	20%	40%
10	Promotion activities	38%	32%	30%
11	Others	28%	37%	35%

It is inferred from the above table that 40% of the sample farmers were highly satisfied with the price of the bio-fertilizers; 55% were highly

satisfied with the effectiveness whereas 21% were dissatisfied. A majority of 46% were dissatisfied with the package.

**TABLE NO:4**

**Ranking of Bio Fertilizer on the Basis of the Purpose**

<i>FACTORS</i>	<i>R -1</i>	<i>R-2</i>	<i>R-3</i>	<i>R-4</i>	<i>R-5</i>	<i>R-6</i>	<i>R-7</i>	<i>R-8</i>	<i>R-9</i>	<i>R-10</i>
Price	3	5	4	5	3	4	4	2	10	9
Effectiveness	4	5	3	3	10	6	7	5	5	2
Quality	4	3	10	8	5	6	4	5	3	2
Brand	7	5	7	9	6	3	5	3	3	2
Dealers advice	10	8	3	5	4	7	3	2	3	2
Eco friendly in nature	5	10	6	5	5	7	6	2	2	2
Credit facility	3	2	4	6	6	6	5	9	6	3
Availability in season	3	5	7	3	3	3	9	9	5	3
Package	2	3	3	3	3	1	3	6	8	10
A.O.'s advice	6	4	3	3	5	7	4	7	4	7

WEIGHTS GIVEN:

(i.e.).  $\sum w_i = 55$

$$\begin{aligned} \text{Weighted average} &= \frac{\sum f_i w_i}{\sum F_i} \\ \text{Where } w_i &= \text{Weight given to the } i \text{ st cell} \\ F_i &= \text{Number of respondents in the cell} \end{aligned}$$

**TABLE NO:5**

**Weighted average of factors**

<i>Factors</i>	$\sum f_i w_i$	$\sum f_i w_i / \sum f_i$	<i>Rank</i>
Price	233	2.33	9
Effectiveness	275	2.75	5
Quality	302	3.02	4
Brand	322	3.22	3
Dealers advice	346	3.46	1
Eco friendly in nature	324	3.24	2
Credit facility	250	2.50	8
Availability in season	261	2.61	6
Package	179	1.79	10
A.O.'s advice	258	2.58	7

From the above table it has been inferred that dealer's advice has been ranked first, eco-friendly in nature got second, Brand got third, quality got fourth and effectiveness got the fifth rank, availability in season got the sixth rank. A.O.'s advice got the seventh rank, credit facility

got the eighth rank, price got the ninth rank, and package got the tenth rank.

**Suggestions**

- The following suggestions are made for the increased production of Bio-fertilizers.

- Government should take steps to improve irrigation facilities because of low rainfall during last three years.
- Advertising laying stress on the factors relating to the cultivation system of Bio-fertilizer and thereby earning high income can be made that should be awareness.
- Since Tamil Nadu occupies a lesser proportion in the cultivation of bio-fertilizers, the agriculture officers should provide guidance of bio-fertilizers for the deviation of the economy
- Government may take measure for providing high quality seeds.
- Sampling test can be done by the agricultural officer before supplying the seed to the farmer.
- Proper transport facilities should be made in the rural areas.
- Like paddy, the Government may fix the price for all crops.
- Marketing steps may be modernized for better crops production and sales
- Both Government and financial institutions may provide loans to the farmers to increase the productivity
- If the result of production increases there may be a possibility for export and there by earning foreign exchange.
- By reducing the usage of bio fertilizer we would be able to produce hygienic products.
- The increase in price of products is mainly due to brokers, Government should take steps to prevent the intermediaries in marketing.
- Water facility should be provided to increase productivity
- Based on research, Chemical fertilizers give more yield than the Bio-Fertilizer, so it has to be worked on and also the expiry date of the Bio-fertilizer is only six months so it should be increased.
- The Bio-fertilizer users should follow certain procedures while applying it to the plant, so practical exposure (field works) on how to use Bio-fertilizers should be given to the farmers.

- The company must take care to maintain the position through consistent performance and communication with the farmers. It must closely monitor and changes in farmers needs and as it adapts to the ever changing marketing environment.
- The company should concentrate more on promotional activities of Bio-fertilizer like farmer contact program, block demonstration/Field trails etc.,

### **Conclusion**

Bio-fertilizers, being the important cornerstone, need intensive research to improve the quality primarily to achieve food security for the growing population and restore soil fertility. Nature has provided countless avenues for research in these fields which needs to be explored. Multi-crop growth promoting activities are most important for sustainable global agriculture. The technologies so developed need to be transferred worldwide to achieve maximum benefits to the society.

The main aim of the bio-fertilizer in the agricultural sector would be to change the cropping pattern according to the requirements of food grains, pulses, oil seeds and of industrial raw materials like cotton to set up productivity in all crops and to make it possible for all sections of the rural population to participate in this development and share its benefits. In the future, enhancement and maintenance of soil fertility through microorganisms will be a very significant concern.

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