**Dynamism of Building People Led and People Owned Adaptation Mechanisms for Climate Change – A Bottom Upward Momentum – A Case Study of Saritsa Foundation Campaigns ­- Colonel Nagar M Verma, Director General Saritsa Foundation. Email:****saritsa@vsnl.net** **&****saritsafoundationindia.in@gmail.com**

Abstract

There has been a significant progress in field of adaptation to impacts of climate change where experts, academicians and technocrats have made commendable contribution to guide international community in the past 20 years. However, there have not been many identifiable substantial initiatives at national and local government levels to make adaptation a local priority.

This needs a significant paradigm shift in conventional wisdom where adaptation and mitigation mechanisms have to be developed at people’s level - a bottom upward momentum for adaptation and mitigation. It identifies a changed priority where regional and national centres take a supportive role to activate peoples willing partnership. Envisaged adaptation plans will have historical strength of local experiences and expertise to identify severity of risk and adaptation plans. These initiatives will have to be supported with technological competence with an eye to build evolutionary and transformational partnership where vulnerable community becomes nucleus of adaptation initiatives. They develop adaptation plans with specifics for challenges they face.

Saritsa Foundation in India advocates and practices people led and people owned action plans for adaptation to climate change which are replicable practices internationally as a future way to move forward beyond 2015. It involves making decisions, evolving action plans and their implementation to be impacted by the community through participatory means. It is their initiatives with recognized the importance of adaptation at local level. It guides them for own investment to minimize risks from climate change challenges with their identified roles and duties with needed information, knowledge, education and skills with support of regional, national and international agencies is the answer for effective mitigation. It will lead them to effective integration with responsibility and accountability. The case study analyzes efficacy and effectiveness of its replication nationally and internationally as a future way for sustainable development and poverty eradication which are derailed frequently by impacts of climate change.

People owned adaptation, mitigation, mechanisms, climate change.

**An Over View – Introspecting the invincible thoughts on Adaptation to Climate Change at People’s Level.**

Knowledge becomes more valuable if it is applied. Confucius (551- 479 BCE)

In past twenty years, UN frame work on convention on Climate Change, international experts, scientists, technocrats, academicians, International organizations, National Governments have achieved a number of milestones including landmark protocol to cut back emissions globally. There have been also significant achievements where many Boards, National Adaptation plans as well as National Appropriation and Mitigation for adaptation have been outlined. All these achievements have added a forward looking dimension to strategies and plans to develop resilience to cope with climate change disruptions. The inconvenient truth raises many questions in the minds of people.

The questions for post 2015 frame work to minimize impacts of climate change is not whether people globally know that climate change is happening or global warming is taking place? The most important question in minds of people is going to be that how they should be able to deal with threats of climate change and how they should prepare their adaptation capacities to deal with disproportionate threats to their lives and means of livelihood, especially the poor? How people have to be mainstreamed in the process of mitigation and adaptation as well as to be contributors to minimize global warming with effective engagement at local level?

The above identified questions bring a new perspective which has to be analyzed and taken care of the problems which are real with enhanced frequencies and complexities of climate change related disasters in recent years.  Time is ripe now where it is eagerly expected that the people’s willingness to be partners has to be translated in the ideas and shared vision of Hyogo Frame work of Action.

It is known that, some 85 percent of the world’s population resides in areas which are affected by severe, impacts of climate change.  It has to be recognized that National Security, disaster risk reduction systems, adaptation plans for climate change at local and national level, economic growth, development and sustainable livelihood are interwoven. It necessitates building safer and disaster resilient world where people adopt a holistic, proactive and multidimensional strategy through a culture of prevention, mitigation, preparedness and response with people centered partnership for adaptation plans.

The potential of devastating impacts experienced every year internationally are tragic realities. Some of the examples of recent past are tsunamis of Indian Ocean Tsunami of 2004, tsunami and earthquake of Japan 2011, and Himalayan flash floods disaster in India in June 2013 as well as a devastating cyclone in Orissa India have exposed the inherent weaknesses of understanding risks and vulnerabilities needing for innovative partnership at people’s level to minimize risks.

The International initiatives which have put climate change management process in its needed perspective with scientific researches in the past are worth taking note of. Yet, evolution of local adaptation plans to minimize risk needs transformative inventiveness to overcome enormous challenges. It has to be built on multidisciplinary research, scholarship and with people’s partnership. Comprehensive and inclusive adaptive mechanisms are vital to achieve UN Millennium Developmental Goals, eradication of poverty and equal sustainable development. In spite of valuable progress in development of national initiatives for adaptation to climate change, unfortunately these have remained “TOP” centric initiatives with little impact at local level where vulnerable people need it most.

The structured and planned attempts of adaptation initiatives so far have no genuine representation of representatives of local people. They are rarely exposed to ongoing plans and strategies. Valuable contributions by experts and academicians have successfully guided national governments to evolve strategies and plans to minimize risks yet; these are of little value to translate these in to in useable form of education where people of developing nations can make use of these in disruptions caused by climate change. There are also local dimensions of challenges where people are divided on the basis of class, caste, religion and regionalism to impliment government initiatives in India.

The trajectory of the path chosen so far for mitigation and adaptation reflects that, there has been little effort to have a deeper insight to the needs of people at grass root level so far. Most initiatives are good in -puts of knowledge and capacities building plans and strategies at the Top of the Pyramid, where most of activities are taken care and strengthened, yet, these have possessed inherent drawbacks of applicability at the Bottom of the Pyramid for developing resilience.

The argument being advocated here is very clear and distinctive that convergence of all plans and strategies hinges on developing resilience of 3 billion people worldwide, who are poor and most vulnerable due to impacts of climate change. They have to be provided doable and useable tools transformed from thousands of studies, papers and good practices which have high value contents. This convergence will be a rallying point for all stake holders to work to make mitigation and adaptation to climate change a People centred, People Led and People owned momentum. The future path has to be chartered in view of unique needs of the people which call for a new model of innovative solutions those focus on affordability and inclusive adaptation practices. This has to integrate individuals, families and societies to develop safety culture and resilience at lowest level.

**The Concept- Why People have to be nucleus of mitigation and adaptation?**

Resilient People are the foundations on which a resilient nation has always been built and must be rebuilt in the future. This concept visualises the important roles and responsibilities of the people where effective voice of vulnerable groups of people i.e. poorest of poor, women, girls, children, persons with disability, seniors, and people belonging to disadvantaged sections of society like untouchables and minority communities in rural and urban areas become heart and soul of disaster management programs and systems, and ensuring self reliance and self-sufficiency in times of disruptions due to climate change. One important consequence of the people centred adaptation practices is its inclusiveness which aims to bring about significant, visible, quantifiable and sustainable change in the levels of managing risk and preparedness through informed, aware, and alert people who have recognised their collective strength to be First Aid of vulnerabilities.

What is being argued is that sweeping changes in history of mitigation and risk reduction cannot be made only by governments or outside agencies, there are "ordinary" people doing smaller things together to protect themselves in disasters which add to its strength. These smaller steps of timely response have not been taken care so far due to overwhelming emphasis on preparing governments. It has been a mistake to overlook those small steps so far because the concept of risk reduction is mostly government centric, there by meaning what nations, states and local governments can contribute for minimizing the impacts is something real not otherwise.

There is no cavalry coming to take part in their battle to cope with disruption and rescue, it can be presumed with commendable analysis. It has to be them. What happens when ordinary people decide that they are the cavalry? Between the things they can do as individuals, and the things government and international agencies can do to respond to the challenges of their times, here lies a great untapped potential. It's about what they can create with the help of each other, who live in common street or neighborhoods the town. If enough people do it, it can lead to real impact, to real jobs and real transformation of the places they live, and much beyond that.

It demonstrates the shift in mind sets of people from helpless victims awaiting and requiring external assistance, to self reliant members of the community who have developed capacities to respond to threats with acquired skills and confidence. This shift necessarily entails the analysis of the capacities and vulnerabilities of affected people leveraging each other’s strengths and innovative use of local resources, experiences and expertise. This includes the analysis of the social, economic and demographic make-up of the community and its infrastructure. Through this analysis, specific relief and recovery requirements are also determined and provided with the active guidance and participation of the society.

The effectiveness of mitigations and adaptation interventions could be ensured when the people at risk are directly involved in the process of risk management. It is also critical that any adaptation plan is dynamic and it remains relevant to the people and their roles and contributions as defined. Through the participative approach, the determination of risks and the intervention measures are not imposed on the people, but rather accomplished by the very people concerned. Moreover, greater emphasis is placed on local knowledge and the indigenous ways of knowing, rather than on expert knowledge and technologies. This allows also for a shift of focus from hazards to socio-economic vulnerability (level of poverty, human development, etc) of the people at risk. Furthermore, it is recognised that people’s involvement not only allows problems to be defined correctly and responsive measures to be designed and implemented, but also allows people to respond to disasters more efficiently and effectively with existing local resources. Also, society based-activities tend to be multi sectoral, thereby reinforcing local organizations and enhancing consciousness, awareness and critical appraisal of risks and their inter-dependence.

This proves even truer when people need help to live and to be prepared to minimize losses. While saving lives, protecting property and means of livelihood, food, shelter, clothing and healthcare count as vital needs for each individual. Germination of ideas in minds of people to think-Let's do something and prepare are vital.' These little steps are important at individual, family and societal levels’.

It is important because they contribute to something bigger – to invest in to it – but also important because it’s small steps that help people recognize that they have power to make a difference.  But what is incredible here is that when people learn to develop Safety Culture, they start to have confidence.

The key to this concept is persistence. What people tell during campaigns of Saritsa Foundation in rural and urban areas is interesting and inspiration. 'We thought that you were going to fail us with your theoretical presentation but you did not.' They say: 'It's really true that doing little things, step by step, makes a difference, We feel confident said a visually impaired women' and when they say that, we smile. We feel very proud. So even if things seem small, or you think it will not make a big difference, just persist and keep on moving forward.

Mitigation and adaptation measures are the sum total of actions taken by people and local institutions in that priority to face disasters. The ownership of mitigation and adaptation has to be given to people in graduated manner with building their capacity with inputs of information, education, training and resources.

One of the essential strength of the concept is that it has made mitigation and adaptation plans a people led and people owned priority. The word community based adaptation and risk reduction has been consciously replaced with people. There have been compelling and distinctive reasons for this deviation from internationally acclaimed terminology of ‘community’.  This concern is more India and developing country specific, because communities not individuals have been cause of conflict and discriminations in developing countries.  A country like India with its population of1.20 billion has about 7000 castes and many religions and sects as well regions with different cultures. In spite of its being a most vibrant and successful democracy, it suffers from divisive delusions where citizens of the nation  are disintegrated on the basis of many communities of upper castes, lower castes, untouchables, minority community Muslims,  Christians and others. In such a scenario of divisiveness, Saritsa Foundation has recognized the importance of people who do not discriminate in crises of disasters and work together to be partners in saving lives and means of livelihood when they suffer most. This is group of likeminded people in rural and urban areas who plant ideas in their minds to work collectively by listening to the voice of each other and make responsible choices to understand their role and accountability to empower themselves and seek support and partnership of local governments and outside agencies to sustain their initiative. The poisonous ideas of special preferences for preparedness, rescue and relief based on community groups are to be taken care effectively by people. To avoid discrimination, which creates chronic conditions of deprivation and injustice that have so long entrapped most communities needed an approach where people work as a cohesive team. This will give opportunity to youth to develop natural leadership which shall not be unbiased of community based claims to lead these initiatives.

***What does it involves?***

When disruptions occur they may confine people and their families to the house or they might lose lives of some members are injured and rest have to be evacuate to safer areas, or their families can be separated. Emergency response and help from local governments, state governments or other agencies may not be immediately available because thousands of people might have been affected in vulnerability of a flood or flash flood, cyclones, storms, land slides, drougths and water scarcity. Climate change threats in local context will endanger them to face local conflicts for water scarcity, irrigation systems, taking care of live stock, flaura and fauna. It is also recognised that there will be more displacement of people to droughts, agriculture failures where caste and religious conflict can take serious turn to disturb peace. This concern has been undoubtedly strengthened more on concentration of devastating on impacts of a flash flood of unimaginable consequences in Uttrakhand, India, where it has taken about 15 days for rescue operations to reach to people and save thousands of them in spite of exemplary operations of rescue and relief.

As in real life, one may face any number of tragic emergencies and serious disruptions. It could be an earthquake, cyclone, flood, fire, an act of terrorism or many more such threatening situations. It needs mapping of a system where disaster management becomes inclusive part of people’s education system with recognised priority. This needs a single recipe to build capacity of people towards achieving greater level of understanding, where they learn to be resilient.

On recognizing the above needed concerns, it is pertinent to understand that, why developing local adaptive capacity and resilience by people could not be inclusive part of risk reduction so far?

 The reasons for creation of such an enabling environment for the people to recognise the importance of their common pool of strength to leverage each other’s capacity are discussed in succeeding paragraphs.

   1. The people in most of the circumstance of climate change disruptions are helpless and overpowered by panic. They have never imagined facing these complexities as well prepared person. It is in built mindset of indifference amongst people to their own safety and protection of means of livelihood which becomes a distinctive reason where they remain outside the loop of guidance for investing in the process of awareness raising and education.

   2. The second reason is that, conventional norms of people’s safety in hazards is correlated with a perception that, government is solely responsible for their safety, rescue, relief and rehabilitation on occurrence of any hazard and they have no role. This detachment in their thought process has enslaved them to over look the need to be resilient. The miracle is that, they go on living under most threatened situations from many kinds of enhanced threats. They confine to creepy dreams and await for government assistance or response from outside agencies for protection. Therefore, little serious effort appears to be made at individual, family or community levels so far.

  3. The third reason is interconnected with an imagined attitude that they and their families are never going to face any severe impacts of climate change. Recent example to be quoted is of flash floods in state of Uttarakhand in India. It may happen to someone else and somewhere else. They are at the mercy of their fate and the God. At the centre of this attitude remains what they have chosen to believe to surrender to the thought that in state of an emergency of disasters, some one-else will arrive to protect them and their families, which has made them passive spectators to the concern

  4. The fourth reasons is lack of awareness and knowledge to identify that climate change impacts and risks manifests locally. They have no will to invest in needed adaptation, education to learn to develop skills to protect.  The pace of coping with shocks and surprises with developed methods does not exist at local level and no attention is considered important by local governments. This thinking process has to change to make people to be self reliant and transform themselves in to a team of good leaders to lead their people to make them sensitive to the need of building capacity for adaptation to respond to disasters with skills and confidence.

***How Saritsa Foundation makes Mitigation and Adaptation a People’s Priority?***

Saritsa Foundation has recognized that, predominantly a single minded approach in the past twenty years where mitigation and adaptation is a Top to Bottom trickle down which has impeded inclusive integration of national policies and people for desired objective. It has also recognizes that it has failed to recognize the diversity value and risk perception of people who suffer these challenges while taking decisions for evolving strategies and plans nationally.

It is a purposeful attempt by Saritsa Foundation for past 14 years to experiment an alternative framework for managing climate change by capturing the imagination and role of local stake holders. It is beyond an iota of doubt that there is an alarming need for effective partnership between people at the local level and governments. It emphasises that national, local governments and outside agencies and civil society organisations have to recognise that they have to support these initiatives in future to take care of existing inadequacies in government’s ability to protect its citizens from impacts of climate change as their Right to Lives in spite of their best efforts needs inventiveness. These gaps in government’s initiatives shall remain unchanged if people are not made owners of this process. Saritsa Foundation initiated action plans where people as individuals, families and societies have to commit themselves to understand their role and accountability to save own lives, family members, property and means of livelihood from frequent disruptions due to climate change and seek needed support from government and outside agencies.

Saritsa Foundation also identified the reason why people were least sensitized to protect themselves and their means of livelihood? It was researched that only way to concretize genuine pattern to empower people and develop their willingness to be equal partnership is to make them aware of risks and vulnerability to them in the regions where they live  and  provide them access to information, knowledge and education to make them develop skills and confidence in disasters. Sensitizing inherent strength of local expertise, experience and innovative use of local resources was considered a valuable point for people to make immediate use.  The important dimension to create awareness among people needs helping them  to  emerge out of conventionally perceived understanding that only  governments, outside agencies and God are to be solely responsible to protect their social, economic, cultural and psychological well being.

Saritsa Foundation is A ‘Mobile University’ for Disaster Risk Reduction and Climate Change. Saritsa Foundation has a mission to empower people with inputs of awareness, imparting education and developing knowledge and prepare people to develop coping capacity in complex situations by reaching at their Door Steps in rural and urban India in 19 states.

It was important for Saritsa Foundation to identify relationship between man and nature to inspire people at local level to protect nature their lives and means of livelihood to guide people to be resilient. Atharva Veda one of the ancient document of wisdom in INDIA includes three coplets (Sarlokas) which were composed thousands of years ago, contain a well defined range of spectrum of knowledge which is being propounded under various scientific, academia and analytical forms by experts and technocrats in the past two decades has been a mother son relationship in cultural context of Indian people and earth. One of the couplets which high lights the message for people’s direct engagement with nature to engage was written thousands of years ago-

*“We aspire to live long,*

*Our children too would live long and be free from sickness*

*And consumptions*

*We all are reared up in the lap of mother earth”.*

May we have long life (provided) we are watchful and alert and sacrifice for her. (ATHRAVA VEDA 12.1.62)

The most challenging dimension which Saritsa Foundation has taken care is to build capacity of people to adapt by guiding them to evolve local action plans with use of local resources to adapt. It is significantly sensitized that full potential of adaptation at local level depend on following factors:-

1. Identification of potential risk and vulnerabilities where people live – people are made aware about risk and vulnerability to their regions and guide them with inputs of scientific knowledge and integrate it with traditional knowledge and capacity. People are made to mindmap action plans to respond.
2. Providing identified knowledge, education and practical training including field work to develop adaptive capacities with enhanced awareness at individual, family and societal level. This involves conducting of workshops, seminars, debates, family counseling with support of elected members of village bodies/municipal bodies, women, youth and local leaders. The demonstrations as field work are also inclusive part of this capacity building.
3. Enhancing adaptive capacity is strengthen to use by sensitizing timely use of local resources innovatively with demonstrations, practices and mock drills.
4. Motivating people to build local leadership, institutions, organizations, societal forums and religious forums to support such initiatives for sustainability. Support of local government and NGO’s has to be part of overall plan.
5. Encouraging participation of women, girls, persons with disabilities, seniors, youth, common citizens and representatives of local government and NGOs integrates people for a common cause.
6. Localization of learning processes is encourage with provision of constant inputs of education for knowledge building a sharpening of skills, concepts, change of attitudes and behaviour to enhance the performance of individuals with creation of local education groups or centers. It inspires them to take genuine interest and remain motivated to cope with local situations. Creating local knowledge hubs with local group of people at village or ward or district level with identification of trainers and motivators needs to be institutionalized. The awareness raising process has to be continued and sustained
7. To pay specific attention to make people learned to plan alternative means for coping with abrupt disruptions, impacting health, agriculture, fishiaries, flora and fauna, live stock, poultry farming and other means of livelihood where income generating alternative have to be taken care.
8. Provision of adequate financial resources is the key to sustain mitigation and adaptive plans. It important to mention that people have to be convince to invest in taking care by individual, family contributions as well as support of societal forums, religious forums, donors, administrative organizations, corporate sector, local government agencies, and outside organization collectively. Saritsa Foundation has achieved very tangible outcomes with minimal support from governments and international donors.
9. Quantification of sustainability of these adaptive measures is pivotal for the success of this concept. The local institutions have to continuously monitor the continues progress at various levels of society. Knowledge and experience sharing by local government authorities and institutions will be a help in this process.
10. The concept being advocated and practiced by Saritsa Foundation has a potential to be a good practice to fill the existing gaps in the process of mitigation and adaptation to the challenges of climate change. It has to be considered a potential way for the future.

***How Saritsa Foundation navigates its innovative methodologies to increase People’s willingness to recognize the importance of mitigation and adaptation at their level?***

Saritsa Foundation has evolved modules which highlight the importance of following concerns:

1. How it affects their lives and what role or responsibility people have?
2. How understanding the need can help them to prepare to adapt?
3. How people could be equal partners in the process of mitigation and adaptation?
4. How can they be free of a prevailing mindset, where, government ownership for disaster management is considered the only way to protect?

In its methodology to raise awareness, impart education and training for mitigation and adaptation for climate change, the teams of experts of Saritsa Foundation concentrated on the following factors:-

* Participatory Discussions – Reach to people, talk to people and prepare people is the strength of the concept. Participants are encouraged to identify the risks and vulnerability to their region evolving threats to lives, property, infrastructure and means of livelihood and share it. It is simplified by giving them an opportunity to mind map problems which they are going to face and how best these could be taken care. They are made aware about threats of disasters which are most likely to happen in the regions where they live and would impact their family’s safety and loss of property.
* Modules of Region Specific Training – The modules are aimed to undertake measures to build capacity amongst people to deal with complex situations of their areas.. The identified groups of participants are imparted education for prevention, mitigation, preparedness and to minimize losses with timely response.  Skills   are developed to achieve a level of alertness and confidence to respond. Innovative use of local resources by participants   is an important part of capacity building. This process of awareness raising is further strengthened with practical training and mock drills where assessment of responses is quantified in live situations of scenarios where they act to protect lives, utilities, live stocks and other income generating resources. First Aid, Rescue and evacuation are inclusive part of this training. Participants are guided to make individual, family and village, school, town Disaster Management plans. It also guides people to learn to support response teams from governments and outside agencies.  How they can be equal partners in planning and implementing relief and rehabilitation is debated? It is important to mention that this module of education and training has been successfully followed for most groups of people like women, girls, disabled, youth, seniors, hospital services staff, government employees, representatives of NGOs, staff and members of corporate sector, police personnel, civil defense, Red Cross Society members and defense personnel. The trained persons proudly believe that, We can do it and are FIRST AID of disaster management.
* Evolution of Needed Mechanisms to sustain these initiatives of capacity building – The most important dimension of empowering people involves the concerns where such an education and training becomes part of individual, family and societies routines equaling with other human needs. Local trainers and motivators are identified at each capacity building program me and they are guided to continue such education and practical training within their families and societal groups of people. The trainers and motivators are guided to organize periodic discussions to update their plans and practice these. Identifying   local training resources and seeking support from other knowledge centers as well as local governments and organization has to be a continued effort.
* Impact Quantification – It is an important insight into the process of education and training where it is ascertained that the learning impacts to build capacity of people are quantifiable. It is achieved with four stages of capacity building. The first stage involves where, inputs of information and knowledge is shared in usable and simple language which touches the sensitivity of the participants to inspire them. They come to   a level of acceptance where they know what is going on and what purpose it is going to serve? The second stage of the education covers identification of mitigations, prevention and preparedness measures where, innovative use of local resources, experience and expertise is paid specific attention with practical training. The third stage of learning identifies solutions to live situation scenarios of disasters and responses to these in teams under an appointed leader of the team and it is a timed competition amongst the teams. Forth stage evolves selection of participants as trainers and motivators for sustaining this capacity building process locally.
* Financial Sustainability – The most challenging dimensions of capacity building, education and training faced by Saritsa Foundation have been organizing financial support to continue with the mission. Keeping in view the minimal support from local governments and outside agencies, Saritsa Foundation has been able to inspire local political groups, religious forums, administrations of schools, colleges, universities, hospitals and people themselves to share the responsibility to invest in such an education and training. The people are inspired to seek partnership with local governments to support their knowledge and training initiatives time to time.

***Picturing the way to success post 2015***

Saritsa Foundation has been able to clearly visualise the future path to mainstream people as inclusive component of building adaptive capacities to cope with abrupt challenges of climate change. The drive towards recognizing people to be heart and soul to share and bear the burden of mitigation and adaptation has to be real beyond tokenism. People led and People owned mechanisms for resilience have to be identified by National Governments and International Agencies to support this transformational and innovative plan.

Moreover, the above identify approaches in future is indispensable if we intend to address the needs of the most vulnerable beyond 2015.

***Conclusion***

 “Repeat anything often and it will start to become you” said Tom Hopkins. If people are made partners to commit themselves to the cause to save lives, property and means of livelihood in due to disruptions of climate change, they can move mountains. The only guiding factor to be taken care is handing over of the ownership to the people who are at the bottom of the pyramid of adaptation and National governments have to be partners in this.

In consonance with the approach taken in this paper guides to lay a road map for adopting a coordinated and holistic approach to advocate and practice People centred, People led and People owned mitigation and adaptation methodologies. An effort has been made here to capture the essence of future plans for practitioners and academicians to promote collaborative efforts to make this viable concept as a future way for effective adaptation strategies. The challenge analysed here is to strive towards higher level of understanding where empowering people at local levels to seek their willing partnership for effective adaptation policies, plans and implementation gains its needed priority, where, Bottom Upward Momentum for Adaptation becomes a reality in future.

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