Subject: Proposed Book on Disaster Management – Answers to the points in the Interview Guide:

Point 1 – WHAT IS YOUR PERSONAL AND PROFESSIONAL JOURNEY IN DISASTER DOMAIN?

I happened to be posted in Krishi Bhavan, New Delhi from February 1990 to May 1995, in (a) the Department of Agriculture & Co-operatives (DAC), first as Additional Secretary and then as Special Secretary and finally as Secretary to Government of India in this department. During this period I had the opportunity to supervise the activities relating to disasters such as annual floods, droughts and cyclones as well as occasional earthquakes that usually occurred in the earthquake prone areas of the country. The Uttarkashi Earthquake of intensity 6.8 in the Richter scale took place in October 1991 and the Chamoli Earthquake of similar intensity took place in March 1999, both in the Uttarakhand Division of the then state of Uttar Pradesh. Both these earthquakes caused considerable loss of life to humans and cattle and damage to houses and roads in these two districts and neighboring areas. The Gujarat Earthquake of intensity 7.7 in the Richter scale which took place in January 2001 in the Bhuj area, devastated housing complexes and infrastructure over a very large area along with considerable loss of life to humans and cattle. I was personally involved in the relief, rescue and rehabilitation activities of the Uttarkashi Earthquake of 1991 from the Government of India side along with the local district administration of Uttarkashi and the state Government of Uttar Pradesh. The Chamoli Earthquake of 1999 and Gujarat Earthquake of 2001 were studied by the experts of the HPC and deliberated upon by the HPC at considerable length.

The Subject of Disaster Management was assigned to DAC, primarily because it was the farmers of India who had to bear the brunt of the first three types of calamities mentioned above and the task of administering rescue and relief to the farmers and their rehabilitation, restoration of their lands and agriculture, was a primary concern of the DAC. I noticed how year after year the quality of rescue, relief and rehabilitation that was administered to the farmers and the quality of restoration of their lands and agriculture, improved perceptibly due to the learning from the experience gained in the previous years, which was noticed during my five years' posting in Krishi Bhavan.

(b) Perhaps, with this background of my experience in disaster management, I was appointed as Chairman of the High Powered Committee (HPC) set up by the Government of India in 1999. The finest experts of nearly all known disciplines in disaster management were members of the HPC and so long as this exercise continued in various formats for about the next five years, I

had the privilege of interacting with them. This was a priceless experience for me in disaster management, as a life-long professional of public administration.

(c) In my younger days I had done both the preliminary and advanced courses in mountaineering from the Himalayan Institute of Mountaineering, Darjeeling, which familiarized me with the rescue and relief aspects of mountaineering, apart from learning about the many known and unknown hazards of this adventure sport.

Point 7 – WHAT TRIGGERED THE CHANGE FROM RELIEF CENTRIC TO PREPAREDNESS, PLANNING AND MITIGATION IN OUR COUNTRY?

It was noticed over the years during which I was involved in disaster management in India, that preparedness and prevention planning for, specially annually occurring disasters like floods, drought and even cyclones, seemed to considerably reduce the cost of rescue, relief and rehabilitation due to such disasters, apart from reducing loss of life of humans and their cattle, in the case of farmers. Damage and loss of life due to earthquakes usually occurred mainly through buildings and bridges collapsing, which invariably killed nearly all the residents of those buildings. The remedy for this lay in propagating and promoting adoption of proper earthquake resistant designs for houses and other buildings and bridges. Wherever this was done damage to life and property was minimized. This kind of analytical approach to preventing or minimizing all kinds of disasters led to considerable reduction in the cost of rescue, relief and rehabilitation that becomes necessary after disasters take their usual toll.

The issue of how the development process adopted in the country itself could become a cause for creating disasters was also noticed during these years, particularly in relation to road building activities and laying of railway lines. Building a proper metal road implies leveling of land and filling the low lying portions, throughout the length of the newly road planned, which process if done without regard to how this activity is going to disturb the natural drainage of rainwater in the hinter land, can become a cause for flooding and water logging in some areas as well as lowering of groundwater levels in other areas, seriously upsetting the farming activities on the two sides of a newly constructed road or a newly laid railway line. Imagine the consequences of such negligence in order to minimize the cost of road building and laying of new railway lines spread over the six odd decades after India became independent. One can imagine how, year after subsequent year, calamities like vastly accentuated floods and droughts which occurred in such a situation during the annual rainy seasons, causing widespread annual damage to crops or in the absence of rain, drought-like conditions to force farmers to resort to migration to the nearest cities, in large parts of the country.

The situation in the hills was even more catastrophic where indiscriminate blasting of rocks on hillsides for road construction or building dams resulted in debris sliding downwards to damage the terraced cultivated fields of farmers as well as the same getting deposited in riverbeds to muddy their waters. During the rainy seasons, this situation also resulted in massive landslides and mud slides, thereby eroding precious surface soil all over the hills, causing incessant soil erosion year after year, which too caused the further silting of river beds in the hills. Another set of unintended damage which occurred due to this indiscriminate blasting was to utterly dislocate the precious clear water springs which provided drinking water to all the surrounding villages, apart from irrigating their terraced fields. The lives of the hill people, was in short, transformed into nightmares due to these development activities. Surely, the country could do with a less damaging development strategy. Observing how in the whole country, the pattern of development itself had been a cause for calamities to occur frequently, the HPC was constrained to observe that instead of promoting haphazard development indiscriminately, a 'sustainable development' strategy should be adopted in a sensible manner, taking fully into account how planned development had already upset the ecosystem of vast areas, to prevent disasters in future.

It would be worthwhile to review the development strategy adopted by the various governments at the center, the states and the district levels after the HPC report came out in the year 2003 or so, to check whether any change in this development strategy has taken place. My own impression is that scant attention appears to have been paid by them to this aspect of disaster prevention.

Point 8 – WHY DISASTER DISCOURSE IS GIVEN A SECONDARY TREATMENT IN GOVERNANCE UNLESS DISASTER STRIKES?

My own perception is that in the matter of seasonal disasters like floods and drought as well as in the case of cyclones for which now advanced meteorological warnings have become available well in time, the rescue, relief and rehabilitation activities take place in a planned manner every year so as to minimize the impact of these disasters. Even in the case of earthquakes, the damage due to them has been minimized considerably with the adoption of safe building and construction codes which were recommended by the HPC. I notice, however, that in the case of fire hazards caused by electric short circuiting in summer months, there is considerable negligence which results in unnecessary loss of life and property due to them. Another set of disasters which often take an unnecessary toll of human lives, that seem to be caused by negligence in observing factory safety regulations, is on account of leakages in

chemical gases from chemical industrial units. One of the biggest cause of fatalities have been road accidents due to rash driving which continue to exact heavy toll annually. Trains getting derailed, also seems to be a cause of fatal rail accidents, which are avoidable. Annually, a large number of deaths due to atmospheric lightening strikes in rural areas of Uttar Pradesh and Bihar, specially in the open spaces, is a calamity which seems to have no remedy.

Point 12 - WHAT ARE SOME OF THE CRITICAL CHALLENGES IN GOVERNANCE AND BUREAUCRATIC SYSTEMS?

In governance, one aspect of work involves a settled routine to oversee or implement routine functions like revenue and tax collection, maintenance of law and order, maintenance of records of various kinds, extending support to legislative functions like answering parliamentary or legislative questions, annual preparation of budget proposals along with other parliamentary or legislative functions and keeping a close watch on the state of the economy. Attending to public grievances at all levels too is a major concern. Good governance implies that as and when urgent matters confront the system, it attends to them without seriously upsetting its routine functioning. An inefficient governmental system, however, becomes negligent regarding attending to its routine functions when faced with urgent matters of public safety and welfare. This situation, if allowed to continue for any length of time, creates a situation where even attending to routine functions becomes like an exercise in disaster management. Such a system may find itself at see if faced with a real disaster.

Development Planning is an important function of governments at all levels which has to be strictly in accordance with the needs of all the people and communities concerned and is also expected to involve their association both in planning and implementation as far as feasible. This is an area where the quality of governance and supervision needs to be of the highest quality at all levels to prevent shabby plan preparation and to ensure their proper implementation. In spite of state governments being publicly committed to bring about sustainable development, in practice however this does not seem to be happening, which has caused a great deal of damage to the environment and eco-systems wherever planned development has taken place, causing floods and drought in large parts of the country during the rainy seasons annually. To correct this situation perhaps, every development project should in future have a component of eco-restoration to make up for the damage to the eco-system that may take place due to the development projects taken in hand. Also, damage done in the past due to development projects too needs to be attended to by taking in hand solely eco-restoration projects in a phased manner to restore the ecosystems so damaged.

Dealing with emergent situations like responding to reports of disasters of various kinds and intensities is a function which calls for immediate action to set into motion the rescue, relief and rehabilitation activities at all levels, depending on the nature and extent of a disaster, which requires an adequate infrastructure of communication and transport for movement of men and material. If there is a readymade response system in place which can be switched on when required, then all the necessary actions get taken swiftly to do the needful at different levels. Fortunately, after the HPC Report came out in the early years of the decade of 2000-2010, most states and the center have developed such readymade response systems at their respective levels down to the district, taluka and even village panchayat levels. Considering that the first responders in any calamity or crisis or disaster are the local communities, there is urgent need to empower and train them suitably through the village panchayats. This is a task which in my perception, is still waiting to be taken up seriously.

Point 16 – GIVEN THE CURRENT PANDEMIC WHAT ARE THE SUGGESTIONS AND RECCOMMENDATION IN YOUR VIEW TO DEAL WITH DISASTERS IN FUTURE IN A MORE COMPREHENSIVE AND HOLISTIC MANNER?

India's experience of the polio eradication programme to completely eradicate the disease which stretched over two decades beginning from the year 1995, was brought about through a systematic development of the health infrastructure in every district down to the public health center and sub-center level in every development block of the country as well as through training of a vast army of health workers. When the latest pandemic Covid 19 knocked at our doors in early February 2020, this infrastructure swung into action and screening of passengers entering India through all airports, seaports and land routes was resorted to, which enabled India to begin with a slow internal transmission of such of the virus which entered somehow in spite of this screening.

A meeting of over 3000 odd Tabligi Jamaatis comprising of hundreds of Jamaatis from abroad as well as from all parts of India, which took place on 12th to 15th March, 2020 at the Markaz, near the Dargah of Nizamuddin in Delhi, became the first hotspot of virus incubation, to slowly develop into a virtual virus bomb, ready to explode serially by the last week of March. Fortunately, PM's call for a peoples' voluntary Janta Curfew on Sunday, the 22nd of March 2020, with a slogan to save lives - "Jaan hai to Jahaan hai", signaling introduction of a three weeks long nationwide lockdown with effect from 25th March, stopped this ticking bomb on it's track. Gradually, when streams of infected people began to come out from the Markaz to fan out throughout the country in buses and trains, the first massive transmission of the virus in India

took place, which continued to play out during the whole month of April. Mercifully, the Holy Month of Ramzan beginning in the last week of March and continuing up to the last week of April intervened and in a way, was very conducive to bring this furious wave of virus transmission to become gentler. In the month of April the number of Jamaatis infected in the country up to a given date, constituted as high a percentage as 40% of the total number of persons infected in the whole of India.

By the beginning of May, the migrant laborers held back in the metropolitan cities due to the nation- wide lockdown, with the promise of free meals began to clamor to return to their villages, because the host states had indeed, failed to live up to their promise to feed them and take adequate care of them. Thousands of trains during the months of May and June were commissioned to carry back over 70 lakh migrants to their villages in different parts of India. This became a far bigger wave of virus transmission during the months of May and June, than that of the Jamaatis in the month of April, but fortunately this one did not take place alongside the former wave, due to the extended nation-wide lockdown which was in place by then, otherwise the spread of the virus in the whole country would have been finally many more times greater.

The redeeming feature of India's approach to regulate the pandemic by a mixture of lockdowns and easing of the same in a calibrated manner, as declared by the PM with the slogan — "Jaan bhi Jahaan bhi" meaning saving lives but saving livelihoods also, has been that while the number of infected cases continues to rise in a gradual manner due to the two sets of virustransmission-explosions respectively in the months of April and May-June, the number of infected cases who have recovered is as high as over 60% of the total infected cases, with far fewer total deaths than in any other country in the world having comparable number of total infected persons. It was noticed that with the passage of time since the infections began to spread in February, our health system gradually became more and more efficient with experience, in treating the infected patients successfully. In other words, India has saved lives through its containment strategy. Different states have been given freedom to choose their own strategies of unlocking their lockdowns, to resume agricultural and other development, industrial and trade related activities to attend to peoples' immediate livelihood needs outside the containment zones which areas however, continue to be strictly under lockdown throughout India, with each household getting checked for the virus infection.

The number of casualties in the Spanish Flue Pandemic a century ago in 1919-'20 was far in excess of the casualties in the present Covid 19 Pandemic worldwide. This is how improvements take place in tackling such pandemics when they recur. After all, viruses are different every time they strike in a pandemic and studying their behavior before tackling them is crucial. The

medical and health infrastructure and human resource that has been developed the world over and in India for tackling the Covid 19 Pandemic will again come in handy in future when required.

6th July, 2020. J. C. Pant.