ENSURING DRINKING WATER IN RURAL AREAS THROUGH ACTIVE GRAM PANCHAYATS

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Abstract

Drinking water is essential for sustaining life. Ensuring easy access, adequate quantity and quality of drinking water in rural areas of India has been a challenge for governments for long. As drinking water is directly related to health and sanitation, overcoming this challenge becomes all the more important. Making available and managing clean water and sanitation is one of the global Sustainable Development Goals included in Agenda 2030. Government of India and State governments have been making efforts to achieve this goal through various schemes and programmes. However, local planning and action is more important in this regard. This analytical paper discusses the role of Gram Panchayats (GPs) in planning, implementing, monitoring, managing and social audit of drinking water schemes in rural areas. Several GPs in different States have thorough local initiatives have successfully demonstrated that ensuring safe and adequate drinking water to rural households is possible. If the Central and State governments strengthen GPs with adequate devolution of funds, functions and functionaries, necessary infrastructure and capacity building of elected representatives and functionaries, such success stories can be replicated everywhere.

Key Words: Gram Panchayt, Drinking Water, Sanitation, Gram Panchayat Development Planing

1. Introduction

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It will not be wrong if we say that water is second most essential need after air to sustain life. An average person needs 4 litres of clean water every day to survive—this is not surprising given that 70 per cent of our bodies are actually made up of water (Ministry of Panchayati Raj, P.7). Approximately 60 percent our body weight is water and our body uses water in all its cells, organs, and tissues to help regulate its temperature and maintain other bodily functions. Because our body loses water through breathing, sweating, and digestion, it's important to rehydrate by drinking fluids and eating foods that contain water. Water flushes out toxins and wastes. Adequate water intake enables our body to excrete waste through perspiration, urination, and defecation. The kidneys and liver use it to help flush out waste, as do our intestines. Water is a major component of blood which carries nutrients and oxygen to and from all cells. Water cushions joints and protects tissues and organs like the brain from shock and damage. Water helps maintain a healthy weight. Moisturizes the air in lungs Water helps to alleviate constipation by moving food through the intestinal tract and thereby eliminating waste. The amount of water we need depends on a variety of factors, including the climate we live in, how physically active we are, and whether we are experiencing an illness or have any other health problems.

2. Status of Drinking Water in Rural India

As of August 2017, 96% of rural habitations have access to safe drinking water. In 2011, the Ministry of Drinking Water and Sanitation came out with a strategic plan for the period 2011-22. The plan identified certain standards for coverage of habitations with water supply, including targets for per day supply of drinking water. As of February 2018, 74% habitations are fully covered (receiving 55 litres per capita per day), and 22% habitations are partially covered (receiving less than 55 litres per capita per day). The Ministry aims to cover 90% rural households with piped water supply and 80% rural households with tap connections by 2022. The Estimates Committee of Parliament (2015) observed that piped water supply was available to only 47% of rural habitations, out of which only 15% had household tap connections. It has been noted that NRDWP is overdependant on ground water. However, ground water is contaminated in over 20 states. For instance, high arsenic contamination has been found in

68 districts of 10 states. These states are Haryana, Punjab, Uttar Pradesh, Bihar, Jharkhand, Chhattisgarh, West Bengal, Assam, Manipur, and Karnataka. Chemical contamination of ground water has also been reported due to deeper drilling for drinking water sources. It has been recommended that out of the total funds for NRDWP, allocation for water quality monitoring and surveillance should not be less than 5%. Presently, it is 3% of the total funds. It has also been suggested that water quality laboratories for water testing should be set up throughout the country (Roopal Suhag, 2018).

At present out of total 17.25 lakh rural habitations in the country. As per the Ministry of Drinking Water and Sanitation, about 77% of rural habitations in India have achieved full coverage status i.e. these habitations are getting 40 litre per capita per day and 54% of rural populations have access to tapped water. Currently close to 64,000 rural habitations suffers from problems of water quality, mainly arsenic and fluoride contamination (Ministry of Drinking Water and Sanitation, 2018. Pp. 47-48). As on 31.3.2019, only 18.33% of rural households i.e., 3.27 Crore out of the total 17.87 Crore rural households in the country, have piped water connection. Thus about 14.60 crore rural households are to be provided with functional household tap connections (Ministry of Drinking Water and Sanitation, 2019). As of January 1, 2019, 3.6% of the total habitations were affected by contamination of ground water mainly due to Flouride, Arsenic, Iron, Nitrate and other contaminants.

3. Government's Initiatives

The Government of India's first major intervention in the rural drinking water sector, started in 1972-73, through the Accelerated Rural Water Supply Programme (ARWSP). A technology mission on drinking water was started in 1986, which in 1991-92, was renamed as the Rajiv Gandhi National Drinking Water Mission. In 1992, 'Rural Drinking Water Supply' was declared a State subject and also included in the eleventh schedule of the constitution, among the subjects that may be entrusted to Panchayats by the States. Thus, the participation on the Panchayati Raj Institutions in the rural drinking water supply sector is an important area of focus. In 1999-2000, Sector Reform Projects were started to involve the community in planning,

implementation and management of drinking water schemes which was in 2002 scaled up as the Swajaldhara Programme. Bharat Nirman was launched by the Government of India in 2005 as a programme to build rural infrastructure. While, Phase-I of the programme was implemented in the period2005-06 to 2008-09, the Phase-II was implemented from 2009-10 to 2011-12. Rural drinking water was one of the six components of Bharat Nirman. In the Eleventh Five Year Plan, the basis of coverage under the rural water supply programme telescoped from habitations to households i.e., ensuring drinking water supply to all households in the community. Hitherto rural water supply was predominantly provided through hand pumps. In the Twelfth Five Year Plan, there was a major shift, of emphasis towards piped water supply with the goal of providing at least 50% of the rural population with at least 40 lpcd within the household premises or at a horizontal or vertical distance of not more than 100m from their household without barriers of social or financial discrimination. Upgrading the National Drinking Water Mission, the Department of Drinking Water Supply(DDWS) was created in the Ministry of Rural Development in 1999, which was subsequently renamed as the Department of Drinking Water and Sanitation in 2010. Keeping in view the significance of rural water supply and sanitation, the Government of India created and notified the Ministry of Drinking Water and Sanitation as a separate Ministry on 13th July 2011. The Ministry of Drinking Water and Sanitation provides technical and financial assistance to the States to provide safe and adequate drinking water to rural India.

The National Rural Drinking Water Programme (NRDWP) was launched on 01.04.2009. The scheme underwent certain modifications in 2012. The scheme underwent further major modifications in November 2017 to make it competitive, outcome based and for incentivizing the states for maintaining the completed schemes functional. Weightage in allocation criteria for population affected with chemical contamination has been provided. 50% of second instalment will be based on functionality status of completed piped water supply schemes found in third party verification. 50% of second instalment will be based on the pre-financing central share by the performing states. Higher earmarked allocation has been provided for JE-AES affected areas. Now under this programme, only piped water supply schemes are allowed. Hand pumps are allowed only in JE-AES affected

districts. During 2017-18, Budget Estimates (BE) allocation was for Rs. 6050 Crores. Subsequent to revised estimate, a total of Rs. 7050 Crores was provided. Out of Rs. 7050 crores of Revised Estimates (RE) allocation, Rs. 7037.95 crores was released to States i.e. utilized at the national level including the Ministry level expenditure. During 2018-19. Allocation under NRDWP was for Rs 7000 Crores at BE stage which was revised to Rs 5500 Crore at RE stage. Since November 2017, the elements of Pre-Financing of schemes by States and ensuring Sustainability (functionality) of completed schemes has been introduced in NRDWP to make the programme outcome / output based and result oriented. The physical performance under NRDWP for the year 2018-19, as on 31.03.2019, in terms of coverage of habitations, is asunder (Ministry of Drinking Water and Sanitation, 2019b. Pp. 60-63):

Fully Covered		Partially Covered		Quality Affected		Total	
Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage
18294	32460	52805	30964	8468	4378	79567	67802

The National Rural Drinking Water Programme (NRDWP), currently focuses on providing access to drinking water to India's rural population. Government of India has restructured and subsumed the ongoing National Rural Drinking Water Programme(NRDWP) into Jal Jeevan Mission (JJM) to provide Functional Household Tap Connection (FHTC) to every rural household i.e., Har GharNal Se Jal (HGNSJ) by 2024. The following kinds of works/ schemes are proposed to be taken up under JJM: (i) In-village water supply (PWS) infrastructure for tap water connection to every household; (ii) Reliable drinking water source development/ augmentation of existing sources; (iii) Transfer of water (multi-village scheme; where quantity & quality issues are there in the local water sources); (iv) Technological intervention for treatment to make water potable (where water quality is an issue, but quantity is sufficient); (v) Retrofitting of completed and ongoing piped water supply schemes to provide FHTC and raise the service level; (vi) Grey water management; (vii) Capacity building of various stakeholders and support activities to facilitate the implementation. Under JJM is to provide functional household tap connection to every household with service level at the rate of 55 litres per capita per day (lpcd by 2024 with a focus on small scale, community managed schemes groundwater schemes wherever possible, with emphasis on source sustainability through groundwater recharge and wastewater reuse. JJM would ensure functional household tap connection to every rural household as there is a demand that exists and people aspire for household piped water supply. It will significantly improve quality of life, particularly of women and children and assist in ODF-sustainability as water is important to sustain Swachh Bharat Mission's gains. In the rural areas, for developing in-village water supply infrastructure, water resource management, source strengthening/augmentation, distribution network, treatment plants, etc., unskilled, semiskilled and skilled human resource will be required. Further there will be procurement of various materials for water supply systems. This will generate employment and boost the economy.

Rural water supply is a state subject. The centre-state fund sharing pattern within the scheme for the components of coverage of habitations, quality of water and operation and maintenance of projects is: (i) 50:50 for all states, and (ii) 90:10 for north-east and Himalayan states. After a decade of neglect to drinking water in terms of provisioning of funds, a renewed thrust to drinking water in rural areas is seen this year with the coming of this government into power. From the FY 2009-10 to 2018-19, we witnessed a fall from 87% to 31% in the share of drinking water in the overall budget of the Ministry of Drinking Water and Sanitation. During the same period share of sanitation increased from 13 to 69%. However, in this year's budget Rs. 9150 Cr. has been allocated for Drinking Water which is an increase of 69% over last year's allocation (PRS India, 2019. Pp.4-6). Total estimated cost of JJM is Rs. 3.60 Lakh Crore. The fund sharing pattern between Centre and State is 90:10 for Himalayan (Uttarakhand, Himachal Pradesh) and North-Eastern States, 100:0 for UTs and 50:50 for rest of the States.

Such a renewed focus is necessary too. At present out of total 17.25 lakh rural habitations in the country, people living in about 81% habitations have access to at least 40 liter of potable water per person per day. That means about 1/5th of habitations do not have access to adequate drinking water. Government of India has set a target of achieving universal coverage of household piped water connection in rural areas by 2024 under Jal Jeevan Mission. Seeing the performance of Swachh Bharat Mission, one can be hopeful. However, performance against the target set by 'Har Ghar Jal' programme announced in 2017 makes us believe that much more needs to

be done from village to national level to be able to achieve the target of universal coverage of piped drinking water. More challenging task would be to make it sustain. As per CAG report, between 2012 and 2017, 4.76 lakh habitations had slipped from 'fully covered' to 'partially covered' state. Numbers of such slippage habitations were high in Andhra Pradesh, Bihar, Karnataka, Jharkhand, Odisha, Rajasthan, Uttarakhand and West Bengal (CAG, 2018. P.73). Such slippages are mainly because of inability to ensure water source sustainability and also water system sustainability. For ensuring water source sustainability and water system sustainability it is necessary that Gram Panchayts own the drinking water supply schemes in its areas and are actively planning, implementing, operating and maintaining them with participation of all stakeholders. In short, better governance of drinking water schemes is the need of the hour.

4. Key Findings

4.1 Role of Gram Panchayats: When we talk of governance drinking water for rural areas, issues of participation, transparency, accountability in planning and implementing drinking water schemes, role of Gram Panchayats comes to the fore. Jal Jeevan Mission too gives due importance to community ownership of the mission targeting universal coverage of piped drinking water. In order to instil the 'sense of ownership' among the community/ user groups for better implementation and long-term operation & maintenance of the scheme as well as bringing in transparency, GP/ VWSC/ Paani Samiti will implement the in-village piped water supply infrastructure and related source development. Communities will contribute towards 10% of the capital cost in cash and/or kind and/or labour in all villages except for hilly and forested areas/ NE and Himalayan States and villages having more than 50% SC and/or ST population, where community contribution would be 5% of the capital cost. To assist the village community for in-village water resource management and water supply related infrastructure, NGOs, Voluntary Organizations/ women SHGs under NRLM/ SRLM, etc. will be associated as partners to facilitate the communities in awareness creation, capacity building, planning & implementing the schemes. They would also mobilise the local communities, firm up their aspirations and handhold them for resource mapping as participatory approach and decentralized planning will hold the

key for long term sustainability and operation and maintenance of the system. IJM will focus on integrated demand and supply side management of water at the local level, including creation of local infrastructure for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse would be undertaken in convergence with other Government programmes/ schemes. For targeted delivery and monitoring of specific outcomes, every functional tap connection is to be linked with the Aadhar number of the head of the household subject to statutory provisions. Every asset created under JJM will be geo-tagged. States will carry out inspections by empanelled third party agencies for all infrastructures created under the IIM. GoI will carry out functionality assessment of schemes, based on which fund will be made available to States/ UTs based on their performance. There are people who would like to contribute and donate voluntarily for water supply in the rural areas. To facilitate this, 'Rashtriya Jal Jeevan Kosh' will mobilize and accept donations/ contributions received from various sources to fund IIM (Ministry of Drinking Water and Sanitation, 2019. P.3).

Gram Panchayat as the constitutionally mandated institutions of local selfgovernance and also the closest to the user community. Gram Panchayats are not only the most visible government institution but also accountable to the people as elected representatives is from the GP and is answerable to village community for his actions and inactions. Access, adequacy, quality and sustainability remains out main goals in provisioning of drinking water. In all of these active involvement of village community becomes the most important determinant. Under various components of NRDWP and also Swajal scheme, role of Gram Panchayats, Village Water and Sanitation Committee and village community has been recognised. Gram Panchayats are also mandated to plan for and implement schemes on drinking water as per the article 243 G of part IX of the Indian constitution. Drinking water is one of the 29 subjects listed under Eleventh Schedule which are expected to be transferred to panchayats by state legislatures. Drinking water is one of the basic services entrusted to local governments everywhere. NRDWP guidelines also says that in-village water supply scheme should be planned, approved, implemented, managed, operated and maintained by PRIs and local community.

When we talk of active involvement of community, role of Gram Sabha comes to mind and this is most important constitutionally recognized institutions for recommendations, decision-making and social audit of public services including provisioning of drinking water. All the registered voters residing in the GP area are members of Gram Sabha. This is the only institution of direct democracy in India. Gram Sabha has a role in approval of village drinking water plan including financial proposals. It can review implementation, operational performance and progress of such plan. Gram Sabha may decide on Amount of drinking water required; Listing of sources of drinking water; type of drinking water supply scheme; ensuring safe drinking water in all Schools, Anganwadis etc; Household contribution; Per household charges; Concessions to deprived households etc.

Recommendations and decisions of Gram Sabha are operationalised by the general body of Gram Panchayat. It manages the water supply scheme, either owned by it or handed over to it. Gram Panchayat is responsible for Approving investment plans and accessing funds, Approving annual budgets and user fee charges after discussion in the Gram Sabha, Approving Memoranda of Understanding (MoUs)/contracts with operators, Coordinating with the block and district administration and support organizations such as Block Resource Centre, Hiring operators and trained mechanics for regular maintenance. Elected representatives of Gram Panchayats are also responsible for forming the GPWSC or VWSC and ensuring its effective functioning; resolving conflicts whenever required; Monitoring revenue, expenditure and quality of works; Ensuring equity in water supply and access etc.

GPWSC or VWSC is an important functional committee. Ideally, it should also be declared as Standing Committee of Gram Panchayat. Elected representatives of GP are members of GPWSC/ VWSC. This Committee plays important role in Planning, designing & implementing all drinking water activities; Providing facts and figures to the GP for reviewing water issues; Providing inputs for the village water security plan; Ensuring community participation in all phases of scheme activities; Organising community contributions towards capital costs (cash & kind); Opening and managing bank account for depositing community cash contributions, O&M funds and management of project funds; Commissioning and takeover of completed

water supply works; Collecting user charges for O&M of water supply works; Empowering women in day-to-day operation and repairs of the scheme.

The GP has an important role in ensuring reliable supply of drinking water. O&M is integral to the success of any water supply scheme. For village water supply schemes, the onus rests with the GP. The GP may use assistance from the GPWSC/VWSC/Pani Samiti to overcome the problem of day-to-day monitoring. The GP could also avail technical support from the PHED/RWSS department to ensure peparation and implementation of standard operating procedures; engagement of well-trained pump operators, mechanics, etc.; stocking of generally required spare parts such as joints, nuts, pipes and maintaining stock register with details of receipts and issues; monitoring, regulating and exercising proper supervision of the work of private agencies entrusted with O&M activities; proper inspection of all assets in the water supply schemes etc. (Ministry of Panchayati Raj, 2014. P.42). Roles and responsibilities of various institutions and stakeholders at the GP level have been summaried under Handbook for Gram Panchayats as follows (Ministry of Drinking Water and Sanitation, 2010. P.9):

Tasks	Gram Sabha	Gram Panchayat	VWSC	Pump Operators/ Hand-pump Caretakers
Meetings and Organization	Hold meetings for decisions at key stages Nominate and constitute VWSC	Meet as required by law/rules Appoint the VWSC	Meet once a month Attend Gram Sabha/GP meetings	Attend GP/VWSC and Gram Sabha meetings
Planning	Discuss and decide on sustainability issues like choice of water sources and kind of water supply scheme Discuss and decide on plans	 Approve investment plans (physical and financial) Apply for financing, training and technical assistance Present annual budgets in the Gram Sabha Approve user fee charges 	Prepare/update plans (water source plan, water safety plan, operating plan, service improvement plan) Collect household contributions Prepare annual budgets Prepare	Plan day to day tasks Support the VWSC to prepare/update plans

	and budgets • Decide the level of contribution by households, connection charges, subsidy for SCs, STs and BPL households	after discussion in the Gram Sabha	recommendations for user fee charges • Organize people to not waste water and keep it clean	
Implementation	Diame	Approve works	Hire and supervise contractors Procure goods, keep and audit accounts	
Operation and Maintenance	Discuss and decide on user fees as required for O&M and subsidy for SCs, STs and BPL households	Approve water user charges after discussion in the Gram Sabha	Buy spare parts Hire trained mechanics for hand-pump preventative maintenance Hire specialist support for the operator Connections and disconnections Daily financial management Authorizing expenditure Payments	Day to day operation and maintenance Billing and collection Customer services Material inventory and stock register Water safety by chlorination or alternative treatment Water quality monitoring
Monitoring, Audit and Reporting	Social audit of expenditures	Half yearly review of accounts Half yearly review of budgets Annual reports to Block on implementation progress and operational performance	Monthly review of accounts Bookkeeping Quarterly reports to Gram Sabha/GP on implementation progress and operational performance	Weekly review of sources and systems Weekly review of cash collection and expenses Weekly report to WSC on operational performance Records and log book maintenance

Success Stories: With community mobilization and collective 4.2 decision-making, many Gram Panchayats have successfully constructed and operated drinking water schemes in their GPs in sustainable manner. Digambarpur Gram Panchayat in South 24 Pargan as district of West Bengal has Constructed a drinking water treatment plant and is supplying tap water to each household of the GP. This has been done through convergence of fund from OSR and labour from MGNREGS. Rs 50 is taken from each household for maintenance. With that amount maximum 200 lt water per family per day is permitted for that amount. 20 paisa per litre is charged for extra consumption. Each tap has a measuring device installed for measuring the amount. In addition, there are tube wells with hand pump. WATSAN committee has been formed with 7-9 users for each such Hand pump. Rs. 5-10 per household per month is charged for maintaining those handpumps. Any repair / maintenance within Rs 5000 is done by the committee itself. For more they have to apply to the Gram Panchayat. Committee works in close contact with the VHSNC and VWSC (STARPARD, 2019).

Bero GP in Ranchi district of Jharkhand revived a dysfunctional Piped Water Supply Scheme. VWSC under the leadership of the Mukhia (GP President) Mobilised villagers and ensured transparency; Visited households and convinced them to pay water charges; Restored water supply system by repairing faulty parts; set up an effective and transparent system for collecting water charges; Partnered with the Drinking Water and Sanitation Department to avail better technology options and to reduce costs (Ministry of Panchayati Raj, 2014. P.12).

In 2010, 128 of 203 GPs1 adopted meters for household connections coupled with volumetric-based tariff and computerized billing and collection in Dakshina Kannada District. This is unique in rural India. In 2010, there were about 43,000 metered connections against less than 4,500 prior to adoption of this practice. Meters have successfully addressed the issue of unequal distribution of drinking water, misuse of water by advantaged groups, constant complaints about inadequate supply of drinking water, non-payment of water tariff due to poor services and unbalanced budget leading to huge pending electricity bills and diversion of development funds towards maintenance of schemes by the GPs. Meters have saved water and

energy cost. Eventually, every household gets water supply and pays according to what it uses (World Bank, 2011. Pp. 13-14).

Challenges Faced by Gram Panchayats: We saw how important 4.3 role Gram Panchayts have in planning, implementing, operating, maintaining and monitoring drinking water schemes in rural areas of India. However, Gram Panchayats face severe challenges. Even after a quarter century of the passage of 73rd Amendment Act, they have not been recognised as local government true spirit. Except 3 to 4 States, Gram Panchayats are not empowered enough to play expected role. Even today in most States, Gram Panchayats have to keep local MLAs, MPs, block and district level officials in good humour to get their development project proposals passed. Approximately 20 percent of GPs do not have their own office building and operate from the houses of GP Presidents. These GPs without office, do not have necessary office equipments and infrastructure. Approximately 30 percent GPs do not have even one dedicated staff. For example, in Haryana, Punjab, UP, Uttrakhand etc. One GP Secretary has charge of 5 to 10 GPs. In such a situation, GP Presidents keep running after the GP Secretary for paper works. Size of GP varies across States from less than 500 to more than 30,000. Approximately 8000 GPs have 500 or less population. In such small GPs, State government find it difficult to provide required infrastructure and staff to function effectively. In most States, only President of GPs receive training. Refresher and Thematic training hardly happens. Inadequate trained resources persons and lack of quality training materials in local languages are affecting quality of training. Although Fourteenth Finance Commission Grants has improved fund availability in the GP, they are still very much dependent on central and state funds. Proportion of Own Source Revenue in the GP fund is still miniscule. Front line functionaries at the GP level do not report to GPs and convergence with other schemes become difficult. Even in the GPDP which is supposed to be a convergent plan and departmental plans are supposed to flow from the GPDP, front line departmental functionaries do not participate enthusiastically.

As reported by the GPDP dashboard (on 7th November 2019), cost of drinking water related works included in the GPDP for the year 2019-20 constitute 6.5% of the total cost of works which is 3rd largest. But only 1% of

the frontline functionaries deputed to GPDP exercise are from departments dealing with drinking water. Not all of them turn up in Gram Sabha or GP meetings.

5. Suggestions

In such a situation, if we have to achieve the target of universal coverage of household piped water connections in rural areas by 2024, we need to enable Gram Panchayats function effectively. We need to recognise them as local governments and not just agents of state and central governments. All the three tiers of Panchayats in general and Gram Panchayats in particular need to be empowered with adequate devolution of functions, funds and functionaries based on activity mapping and principle of subsidiary. In the drinking water schemes approval and funding, intermediate panchayats and district level panchayats hardly have any role. Gram Panchayats must have adequate infrastructure such as office, office equipments. All the GPs must be provided with minimum one dedicated GP Secretary. GP Chairperson & ERs associated with VWSC must get comprehensive training on planning, operating and reviewing drinking water schemes. Like in Poshan Abhiyan, on GP ER is identified and given training, the ERs associated with VWSC should get comprehensive training on planning, operation and maintenance of drinking water schemes and also water source sustainability. Under Swajal, social audit exercise is supposed to be carried out by GP through IEC agency. In all States there is Social Audit Units have been set up under MGNREGA. These units have got experience of facilitating social audits and they can be used for conducting social audits of NRDWP, Swajal, Jal Jeevan Mission.

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