

**GOVERNMENT OF ANDHRA PRADESH
DEPARTMENT OF HORTICULTURE
ANDHRA PRADESH MICRO IRRIGATION PROJECT**

Expression of Interest

Applications are invited from reputed professional agencies having previous experience in evaluation/ monitoring of projects in the agriculture sector for conducting 3rd party verification and evaluation of Micro Irrigation systems taken up during the year 2015-16. They are requested to submit their application through speed post/registered post by hand delivery in a sealed envelope super-scribed as 'EOI for third party evaluation' of MI systems by 10th April 2017 before 5 p.m.

O/o The Project Officer
AP Micro Irrigation Project
TTPC Building, Beside Raithu bazaar,
Chuttugunta, Guntur-522007.
Andhra Pradesh.
Landline:- 0863-2217142
Mobile:- 7330651111, 7337492222

The terms of reference (TOR) and other information for the above work are available in the project website www.horticulturedept.ap.gov.in

Sd/- XXXX
Commissioner of Horticulture
Government of Andhra Pradesh, Guntur

**GOVERNMENT OF ANDHRA PRADESH
DEPARTMENT OF HORTICULTURE
ANDHRA PRADESH MICRO IRRIGATION PROJECT:: AP, GUNTUR**

EXPRESSION OF INTEREST

Expression of Interest is invited for conducting of 3rd party verification and evaluation of Micro Irrigation systems and to carry out impact analysis of Micro Irrigation scheme implemented by AP Micro Irrigation Project for the year 2015-16.

I. About APMIP

State Government has established a special purpose vehicle i.e., APMIP with staff structure till Mandal level for effective monitoring and utilization of Micro Irrigation scheme.

2. Objectives of APMIP

- To increase the area under Micro irrigation through improved technologies.
- To enhance water use efficiency.
- To increase productivity of crops and farmer income
- Savings in energy consumption
- Higher fertilizer use efficiency.

So far an area of 6.93 lakh Ha. has been covered under Micro irrigation in all the 13 Districts in the state since inception i.e. from 2003-04 to 2014-15, benefitting 6.24 lakh farmers ,with a financial out lay of Rs. 3386.89 crores.

There is a potential area of 11.23 lakh Ha., to be covered under Micro Irrigation in the state on 31-03-2016.

The Districts wise area covered under Micro Irrigation:

Sl. No	Year	Physical Achievement (Area in ha)		
		Drip	Sprinkler	Total
1	2	3	4	5
1	Srikakulam	6651	5340	11991
2	Vizianagaram	11647	6300	17947
3	Vishakapatnam	10708	5741	16449
4	East Godavari	16686	4072	20758
5	West Godavari	43465	6679	50144
6	Krishna	20310	8698	29008
7	Guntur	12325	9904	22229
8	Prakasam	25394	10571	35965
9	Nellore	23309	13832	37141
10	Chittoor	81427	14137	95564

11	Kadapa	80379	21366	101745
12	Anantapur	137156	65815	202971
13	Kurnool	30445	20766	51211
Total		499902	193221	693123

The year wise area covered under Micro Irrigation:

Sl.No	Year	Physical Achievement (Area in ha)		
		Drip	Sprinkler	Total
1	2	3	4	5
1	2003-06	48165	51475	99640
2	2006-07	35797	14050	49847
3	2007-08	47815	17400	65215
4	2008-09	56125	20552	76677
5	2009-10	60995	19722	80717
6	2010-11	50086	20690	70776
7	2011-12	46138	12790	58928
8	2012-13	33144	229	33373
9	2013-14	27724	0	27724
10	2014-15	31386	4737	36123
11	2015-16	62526	31577	94103
Total		499902	193221	693123

Best practices / special initiatives taken up in Micro Irrigation Programme :-

1. The entire process flow is made online and New portal of APMIP has been developed linked to Aadhar Database.
2. To facilitate the farmers for better utilization of the scheme, the farmers can register the application online from any Mee-Seva centers in the District.
3. SMS alerts will be sent to farmers at the time of Farmer Registration, Administrative sanctions and for remittance of Non subsidy amount.
4. Selection of MI Company is the choice of the Farmer.
5. State Government is providing additional financial assistance in addition to assistance provided by GOI for the benefit of farmers of Andhra Pradesh to bring more areas under Micro Irrigation.
6. State Government is paying 5% VAT on behalf of the farmer. (Maximum limit of Rs. 5000/-).
7. Reduced cost of MI system through fair and effective negotiations.

8. The MI companies have to extend After Sales Service for a period of 10 years for the MI systems installed, first five years will be free service and Rs.100/- per call for the next 5 years.
9. Call center with toll free number (1800 425 2960) has been established to redress farmer issues through online monitoring system.

Progress made during the year 2015-16.

An area of 94,103 ha has been covered under Micro Irrigation with a financial assistance of Rs.545.63 Crores during 2015-16.

Sl.No	District	Physical (Area in ha)			Financial (Rs. in lakhs)			
		Target	Achievement		Target	Achievement		
			No.	Area		Central	State	Total
1	2	3	4	5	6	7	8	9
1	SRIKAKULAM	2865	1573	1390	1025.11	182.22	424.21	606.42
2	VIZIANAGARAM	2610	2149	2452	1311.99	202.48	556.77	759.25
3	VISAKHAPATNAM	2170	2792	2489	1027.91	171.64	434.69	606.33
4	EAST GODAVARI	3395	1819	2246	1287.64	155.63	421.44	577.07
5	WEST GODAVARI	5410	4723	6659	4230.75	647.05	1682.9	2329.95
6	KRISHNA	3600	3403	3622	2872.08	360.36	978.74	1339.09
7	GUNTUR	3150	3480	3203	1982.7	302.8	841.02	1143.82
8	PRAKASAM	4000	6766	6057	3130.76	1339.63	2563.78	3903.41
9	S.P.S NELLORE	3945	6372	6414	2448.13	547.94	1552.57	2100.52
10	CHITTOOR	23935	17969	15916	15535.83	3482.69	7003.46	10486.15
11	Y.S.R KADAPA	17370	12146	13081	10728.5	2471.81	5524.51	7996.31
12	ANANTHAPURAMU	15690	22652	23194	10039.65	6434.82	12030.32	18465.14
13	KURNOOL	11860	7779	7380	7267.19	1468.73	2780.63	4249.36
Total		100000	93623	94103	62888.23	17767.79	36795.04	54562.83

3. Terms of Reference for conducting 3rd Party evaluation for the year 2015-16

3.1 Major objective of 3rd Party Evaluation

The major objective of the 3rd Party evaluation work is to take up verification of MI systems and to carryout Impact analysis of Micro Irrigation scheme implemented by APMIP (Andhra Pradesh Micro Irrigation Project) for the MI systems takenup during 2015-16.

Number of MI systems to be evaluated: 9195 nos in all 13 districts of state.

3.2 Detailed Objectives of the 3rd party Evaluation

- a) To evaluate whether the MI systems are installed at the correct locations (by using GPS system) and to the same beneficiaries to whom it was sanctioned.
- b) To study whether the MI systems are installed as per the BOQ by using BIS / ISI specified standards MI components.
- c) To evaluate deviations in area of extent sanctioned if any.
- d) To know whether the MI system is functioning satisfactorily or not.
- e) To evaluate present status of MI systems.
- f) Whether the farmer is using fertigation through MI systems. Percentage of farmers using Fertigation.
- g) Number or percentage of farmers using water soluble fertilizers.
- h) To assess the performance and socio-economic impact of MI system with respect to the following parameters.
 - % increase in yield (productivity) of crop
 - % water saving
 - % of decrease in power consumption
 - % of decrease in Fertilizer usage after using MI system
 - % increase in Income
 - Additional area brought under cultivation by the beneficiary after using MI system
 - Amount of reduction in labour cost
 - Incidence of pests and disease attack
 - Improving the socio-economic status of the farmer
- i) To study the After sales service taken up by the MI company and to know the availability of spare parts/ accessories to farmers.
- j) To identify difficulties faced by beneficiaries in using MIS.

3.3 Methodology

a) Data collection

- The study should be conducted with the aid of both primary and secondary data. The primary data should be collected through personal interaction with the farmers with the help of appropriately designed questionnaire. The model questionnaire is hereby enclosed. The organization is expected to collect maximum data as per the specific objectives mentioned in item No.2.
- The secondary data as per the needs should be collected from either O/o Project Officer, APMIP or O/o Project Director, APMIP concerned district.

b) Sampling procedures

- Sample size would be 10% of total installation data. i.e. 9.8% drip and 0.2% sprinkler systems.
- Sample size should be 10% from each district in terms with the above point.
- Stratified random sampling method will be used in selection of the sample and the selected sample will be furnished to the organization in respect of allotted Districts.

c) Time schedule and reporting system

- The organization shall be provided logins by APOnline and they have to enter the collected data and upload the digital photographs and geo coordinates in APMIP online portal.
- The report is expected to be submitted within the period of six months from the date of issuance of the work order.
- Three hard copies of the report along with the soft copy shall be submitted to the Commissioner of Horticulture and the reports will be sole property of Department of Horticulture, Govt. of A.P.
- No part of this report may be revealed, produced, stored in a retrieval system, or transmitted in any form or by any means without the prior written permission of the Commissioner of Horticulture.

d) Mode of payment

- 30% of the total cost as an advance after taking up the work by organization in the allotted districts.
- 30% of the total cost after receipt of half of the evaluation data and uploaded in online.
- 30% of the total cost after receipt of entire data and uploaded in online.
- 10% of the total cost after receipt of Final report within the timeline.

e) The data/Questionnaire for impact analysis of Micro Irrigation is enclosed.

4. The eligibility criteria for the selection of agency

1. Should be registered in India and provide a self attested copy of registration, PAN number and self attested copy of PAN card.
2. Should be working in India for at least 5 years of proven track record and experience in agri. related evaluation projects.
3. Should have implemented a Government programme in agriculture/horticulture sectors, for at least 2 years during the last 5 years.
4. Should not have been blacklisted by Government of India, State Government of AP or other government agencies to this extent a self declaration by the authorized signatory to be produced.
5. The applicant agency should not be a manufacturer of Micro Irrigation System or subsidiary of any micro irrigation manufacturer/dealer empanelled with APMIP or any other state.
6. Should have minimum average annual turnover of Rs.35Lakhs for the last 3 years as reflected in the last 3 years audited balance sheet and financial reports.

5. The following documents need to be submitted along with EOI form.

1. Registration certificate of the agency
2. Copy of the PAN card.
3. Previous 3 years audited statement of accounts. (2013-14 to 2015-16)
4. Previous 3 years annual reports.

For EOI process, reputed project monitoring and evaluation agencies with specific experience and capability having good track record agencies will be evaluated for preparing the shortlist. Only the shortlisted agencies will be invited based on the eligibility criteria.

6. The successful agency/ agencies has/have to be entered an agreement with the department (APMIP) and furnish bank guarantee valid for one year, for an amount of 10% of the total project cost.

7. The Terms of reference (TOR) and other information for the above work are available in the project website www.horticulturedept.ap.gov.in. A complete set of Expression of Interest along with the demand draft for Rs.5000/- (Rupees five thousand only) (non refundable) drawn in favour of Project Officer, AP Micro Irrigation Project, Guntur must be delivered in a written form to the address below by speed post/ registered post/ by hand delivery in a sealed envelope super-scribed as 'EOI for third party evaluation' of MI systems on or before - 10th April 2017 by 5 p.m. EOI received beyond the date and time indicated will not be considered.

O/o The Project Officer
AP Micro Irrigation Project
TTPC Building, Beside Raithu bazaar,
Chuttugunta, Guntur.
Landline:- 0863-2217142
Mobile:- 7675031199, 7337492222
e-mail:- apmiphyd@gmail.com
website:- www.horticulturedept.ap.gov.in

EXPRESSION OF INTEREST SUBMISSION FORM

(Location, Date)

To: (Name and address of client)

Sir,

Sub:- Expression of Interest for conducting 3rd party evaluation of MI systems taken up during 2015-16 under APMIP – Reg.

This is in response to your public notice published in on inviting expression of interest for conducting 3rd party evaluation of MI systems taken up during 2015-16 under APMIP , we hereby submit the EXPRESSION OF INTEREST along with attached required documents for consideration.

The information furnished by us in this EXPRESSION OF INTEREST is correct to the best of our knowledge. Based on these information, we understand you would be able to evaluate our proposals in order to qualify for the above mentioned assignment.

We, however understand that the COMMISSIONER OF HORTICULTURE, Govt. of AP reserves the right to decide whether modify or not to qualify the firm without disclosing the reasons whatsoever.

Yours sincerely,

On behalf of the firm:

Signature:.....

Name of signatory:

Designation

Company Seal.

Application Format for submission of Expression of Interest

01. Details of the organisation

1. Name of the Organisation:

Acronym, if any:

2. Contact Address:

Head Quarters Office:	Correspondence Office:
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3. Authorised signatory of the Organisation:

Name:	
Designation:	Email ID:
Telephone Number : Land Line:	Mobile:
Website:	
3.Year of Establishment:	
4.Legal Status of the Organisation (Trust/Society/Company/ No legal status)	
5.Place of registration of the organisation:	
6.Since how long it is operating (No. of Years)	
7.Was the organisation black listed any time? If yes, provide the details.	
8.PAN No.	
9.VAT No.	
10.Registered under 12A of income tax?	

11.Operational area of the organization (only indicate numbers, even approximate):

Sl..No Name of State No. of District(s) No. of Block(s)/ Mandal(s) No. of Village(s)

02: Management / Administration

1. Briefly mention administrative setup below chief executive – (flowchart)

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2. Are roles and responsibility of staff clearly defined : Yes/No
3. Are staff issued with letters of appointment/contract: Yes/No
4. Does organisation has manual of personnel policy and administration: Yes/No.
5. Is the organisation plan and periodically review its programmes/activities: Yes/No.

Personnel/Staff (Current Status)

		Total of the organisation	Engaged in the proposed district
1	Total number of staff	M: F:	M: F:
2	Total technical/professional staff#	M: F:	M: F:

#staff refers to full time staff with the organisation. Consultants should not be included as staff. If required, please add a row with number of consultants with gender disaggregation.

03.Financial Management

1. Whether there is any internal audit system: Yes/No.
2. If Yes, who conducts Internal audit?: In-house personnel/Outside agency:
- 3.Periodicity of Internal audit report: _____ years.
- 4.Whether accounts are audited by external auditors: Yes/No.
- 5.What financial statements are prepared at organisation (List):
- 6.Financial particulars of the agency.

Financial Year *	Turnover from Professional Services	Turnover from other Activities	Total Turnover	Income Tax return filed (Yes/No)**
2013-14				
2014-15				
2015-16				

* Attach copies of Income and expenditure and balance sheet for these years

** Please attach copies of IT return forms for the last three assessment years.

7. Furnish Audited Balance Sheet: for 2013/14, 2014/15 and 2015/16:

04. Infrastructure Details & Capacity in Information Technology

1. Infrastructure details : Just mention availability.
 - a. Own Office:
 - b. Training Centre:
 - c. Four Wheelers:
 - d. Two Wheelers:
 - e. Others (Specify)
2. Level of Information Technology capacity in the organisation:
 - a. Are the organisation's accounts managed on an IT? Yes/No
 - b. Do you have a web site: if yes, URL:
 - c. Is the website managed internally?
 - d. Does the organisation manage any databases? If yes, which software you use?
 - e. Familiarity with GIS: Not familiar // occasionally use // well versed.
 - f. Use any mobile based software for internal purposes? Yes/No
 - g. Any IT professional in the staff?

05. Experience

(i)	List key thematic areas of intervention/specialisation of the organisation. <ol style="list-style-type: none">1.2.3.4.5.
(ii)	Relevant experience of firm that best fit with proposed assignment (List relevant experiences related to this assignment of the firm during the last five years)
(iii)	Relevant experience of Firm's professional staff in reference to the proposed assignment. (Describe experience of professional staff relevant to the proposed assignment)
(iv)	Pool of human resources available to the firm with relevant experience to the proposed assignment. (Describe experience of external professional staff relevant to the proposed assignment.)

(V) Major work taken up during last five years that best illustrates your performance.

Project's Name:		Country:	State:
Project location with country:		Professional staff provided:	
Name of the client:			
Starting Date:	Completion Date:	Size (Acres/Nos) of the Project	Approximate value of project
Name of associated firms (if any):		Number of person months of professional staff provided by associated firm(s):	
Name (s) of Senior Staff (Project Manager) involved and functions performed:			
Brief description of the project (not more than one pages):			
Details of Evaluation parameters conducted by your agency (not more than one pages):			
Details of the services provided (not more than one pages)			
Details of other parties/firms involved with you.			

2. Details of land use pattern:

1. Land Ownership:
 - a) Owned (in Acres) :
 - b) Leased (in Acres):
2. Total Land (in Acres):
3. Total Area under Horticulture Crops (in Acres) :
4. Area Under:
 - (a) Irrigated (in Acres)
 - (b) Dry land (in Acres)
5. Survey Numbers :
6. Type of Soil : Sandy Loamy / Clay Soil / Loamy
7. Nature of Soil : Hard / Gravely

3. Source of irrigation:

1. Water Source: a. Open well, b. Bore well
2. Depth of Bore well : ft
3. Depth of motor/pumpset installed: Ft
4. Size of delivery: inches,
5. Status of Bore well: Functioning / Non Functioning

4. Trend in area under irrigation:

Year	Irrigated	Unirrigated	Total
Prior to MIS			
After MIS			

5. Sanction details :

	Administrative sanction issued	MI System Installed
a)	<input type="text" value="Year"/>	<input type="text" value="Year"/>
b)	<input type="text" value="Area (Ha)"/>	<input type="text" value="Area (Ha)"/>
c)	<input type="text" value="Crop"/>	<input type="text" value="Crop"/>
d)	<input type="text" value="Spacing (Mts)"/>	<input type="text" value="Spacing (Mts)"/>

- d) Name of the MI Company :
- e) MI System installed details in the field :

i) Crop information in the field

Crop	Row to row spacing (mtr)	Plant to plant spacing (mtr)	Lateral distance (mtr)	Dripper distance (mtr)	Dripper discharge rate (L/hr)

ii) Whether the farmer is receiving uniform discharge at the tail end:

f) Time of operation:

Crop	Frequency of irrigation	Total No. of irrigations		Time of operation(Hrs)		
		Without MIS	With MIS	Kharif	Rabi	Summer

*Frequency of Irrigation : (Daily / Alternate / Once in 3 days /)

6. Existence and utilization status of MI system:

1	Installation of MI system	a) Installed b) Not installed
2	System Installed as per design	Yes / No
3	If not installed - reasons	a) Farmer not ready b) Company not responding c) Trench cutting not done d) Other reason specify
4	System installed, but non-performing - Reasons	a) Partial installations b) Presently No crop c) Drying of water source d) Others specify
5	System installed , but not-existing - Reasons	a) Sold by the farmer b) Binami c) Farmer not aware of sanction d) Others specify
6	a)Present status of Head Control Unit components and their functioning	a) Working b) Not working Reasons for not working- i)Leakages, ii)Insufficient discharge/pressure, iii)Insufficient pressure iv) Non-maintenance of HCU v) Any other, pl specify
6	b)Whether pressure gauge is working or not	a) yes, b) No, c)If yes, reading:
7	Present status of water carrier system components Main / sub main functioning	a) Working b) Not working Reasons for not working- i) Clogging, ii)Non-maintenance, v) Any other, pl specify

8	Water distribution system Fitting and functioning of emitters and laterals	a) Working b) Not working Reasons for not working- i)Leakages, ii)Insufficient discharge/pressure, iii)Insufficient pressure iv) Non-maintenance of HCU v) Any other, pl specify
	Location of MI System details	
1	GPS Co-ordinates of the field (each bend)	a) b) c) d) e)
2	Area of the field	(i) As per the sanction:- Ha (ii) As per the GPS:- Ha (iii) Difference Excess/ Short:- Ha
3	Polygon of the field generated or not:	a)Yes, b)No
	Details of Water sharing, if any	
1	Whether water sharing	a) Yes, b) No
2	Bore well discharge:	inches
3	Total extent under bore well	Hectares
	Number of farmers	
	Adequate water is received	a)Yes, b) No

7. MI Component installed details:

Sl No	MI component	Approved Brand (Yes/No)	ISI marked (Yes/No)	Functioning (Yes/No)
1	Non Return Valve (NRV)			
2	Air release/ Vacuum breaker valve			
3	Throttle valve			
4	Screen filter			
5	Disc Filter			
6	Hydro cyclone filter			
7	Sand/Gravel filter			
8	Ventury assembly			

9	Fertilizer tank			
10	Control valves			
11	Laterals/Emitting pipe			
12	Flush valves			

8. Impact assessment:

i) Impact on cropping pattern:

Season/Crop	Prior to MIS adoption	After MIS adoption
Kharif		
Rabi		
Summer		
Perennial		
Grand Total		

ii) Impact on crop production & productivity :

S. No	Crop	Prior drip		Post drip		Diff. (Ton/h a.)	Diff (%)
		Yield	Rate	Yield	Rate		
1	Kharif-						
2	Rabi-						
3	Summer-						

*Note: Yield shall be furnished in MT/acre and rate Rs/acre

iii) Annual income earned:

S.No	Source of income	Gross annual income		Expenditure (Annual)		Net Income (Annual)	Additional (Annual)
		Prior	Post	Prior	Post		
	Value of crop production/ farm produce						
1							
2							

iv) Annual Saving in use of water:

Additional area can be increased under irrigation due to adoption of Micro irrigation system?	Yes/No
If yes, please indicate how much area has increased?Acres. %

v) Annual Saving in use of labour:

S.No	Agriculture Operations	Labour utilized (mandays)	
		Before drip	After drip
1	Inter cultivation		
2	Fertilizer application		
3	Weed control		
4	Irrigation operations		

vi) Annual Saving in fertilizer consumption & Plant protection cost:

Whether fertigation tank/ventury is installed and used	a) Yes b) No (i) Installed – Used (ii) Installed – Not Used (iii) Not Installed
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S.No	Name of fertilizers/Chemical	Quantity used(Kg/ltrs/ha)	
		Before adoption of DIS	After adoption of DIS
1			
2			
3			
4			

vii) Annual Saving in power consumption :

Due to drip irrigation are you saving in power consumption? Yes/No

If Yes, please indicate in No. of hours of operation in a day/acre :

viii) After sales & Maintenance :

Whether the farmer received training / information after installation of MIS? Yes/No

Specify No. of After Sales Services provided by MI Company after installation	No
No. of campaigns attended by the farmer	No
Nearest stock point of spare parts – specify the distance	km
Farmer is carrying out regular maintenance	a)Cleaning of screen filter, b) flushing, c)acid treatment
No. of times Acid Treatment given	No
Interval of maintenance	a)Once in the month, b)twice in the month, c)more than twice in the month, d)less frequent

PART-II

DIFFICULTIES ENCOUNTERED IN ADOPTION AND MANAGEMENT OF MICRO IRRIGATION SYSTEM

Which of the following problems did you face in the adoption and management of drip irrigation system? Tick mark (✓) the problem and give your valuable technical options to overcome the problems.

S.No	Problems	Tick Mark (✓)	Options to overcome the problem
1	Frequent clogging of drippers		
2	Non availability of skilled workers for repairing of DIS when required		
3	Difficult to maintain required water pressure		
4	Non availability of spare parts in local area		
5	Theft of spare parts of DIS		
6	Availability of spare parts in local area		
7	Frequent repairing observed		
	i)Head Control unit		
	ii) Control valves		
	iii)Emitting line/ Laterals		
8	Lack of after sale services from the company dealers		
9	Lack of training and guidance from		

	MIS suppliers		
10	Insufficient water source		
11	Difficulty in inter culture operations		
12	Difficult to make equal distribution of water		
13	Maintenance cost is very high		
14	Damage caused by rats / squirrels to the system		
15	Damage caused by animals		
16	Damage caused by sunlight		
17	Theft or any other		

Observations of Investigator:

.....

Date:

 (Signature of farmer)

 (Signature of Investigator)
 Name: