



Watershed Development Department

# SUJALA-III

## Newsletter

Vol- 6 / Issue-4

For the Joint Project of World Bank and Government of Karnataka

October-December 2019

### Technology Solutions For Watersheds

#### “Watershed Development for Drought Proofing” Program Launched by Hon'ble Chief Minister



Sri. B S Yediyurappa, Hon'ble Chief Minister, Government of Karnataka launched “Watershed Development for Drought Proofing” Program during Hampi Utsav on 10<sup>th</sup> January 2020 at Hampi. A brochure on State Watershed Program and PMKSY-WDC compendium of Success Stories were also released during the program. Sri. Laxman Savadi , Hon'ble Deputy Chief Minister and Agriculture Minister, Government of Karnataka and Sri. Prabhash Chandra Ray, Project Director and Sujala-III and Commissioner Watershed Development Project were present during the program. Land Resource Inventory (LRI) based approach of watershed planning and implementation which was initiated under Sujala-III project is being replicated by State in 1000 micro watersheds under State Watershed Program.

#### South-South Knowledge Exchange (SSKE) Workshop on Climate Smart Agriculture

A five days International knowledge exchange workshop on climate smart agriculture was organised by Sujala-III project, Watershed Development Department from 16-20<sup>th</sup> December 2019 at Bangalore. The workshop was organised in association with World Bank, Department for International Development – Government of United Kingdom and Indian Council of Agricultural Research (ICAR). 23 delegates across 5 African countries viz Kenya, Ethiopia, Mozambique, Rwanda and Tanzania along with World Bank representative participated in the knowledge sharing workshop. The workshop was inaugurated by Dr. Ashok Dalwai, CEO, National

Rainfed Area Authority, Ministry of Agriculture and Farmers' Welfare, Government of India and presided by



Smt. Vandita Sharma IAS, Additional Chief Secretary & Development Commissioner, Government of Karnataka.

During the workshop the delegates were also exposed to various partner institutions-NBSS and KVAFSU, NICRA project sites implemented by KVKs, Custom hiring centres, Farmer Producer Organisations (FPOs) and Saturation watershed sites of Sujala-III project in Tumkuru, Davanagere and Bellary districts. On the last day of the workshop, the African delegates shared the experience of projects being implemented in their respective countries and expressed their happiness about the scientific approach of Sujala-III



implementation and also about the arrangements and hospitality provided by the project as well as community members in the project districts.

#### Digital Library, LRI Portal, DSS and Mobile Applications Portal is available Live

The users can now access Sujala-III Digital Library, LRI Portal, DSS and Mobile Applications at Live [www.Sujala3lri.karnataka.gov.in](http://www.Sujala3lri.karnataka.gov.in)

## From the Desk of the Project Director &amp; Commissioner



### Exit Strategy and Post Project Sustainability of Sujala-III

Ensuring sustainability of the project interventions is very crucial for harnessing the long term impacts of any scientific watershed Development Program. World Bank assisted Sujala-III project which was implemented from 23<sup>rd</sup> April 2013 to 31<sup>st</sup> December 2019 in 12 districts of Karnataka State. A project can be sustainable in three main categories namely community, financial and organisational sustainability. To ensure this, Sujala-III project has formulated clear project exit strategy and got Government of Karnataka approval for implementation of the same.

#### The approved Exit Strategy involves following major activities;

- Collection, Updation and maintenance of LRI Data from bench mark sites to the Digital Library, Geo Portal, Decision Support Systems, and Mobile Applications. Laboratory maintenance and AMC services for equipment's, GIS facility maintenance, Socio-Economic Study proposed by 6 LRI partners
- Continuation of Hydrological assessment in 14 model micro-watersheds and maintenance of the equipment established under the Project proposed by IISc and 5 State Agricultural and Horticultural Universities.
- Cost requirement for KSNDMC for Annual maintenance of equipment supplied under the project.
- DL, DSS & LRI Portal project
- Manpower cost for Watershed Development Department
- AMC for M/s. Ceinsys Tech. ltd.
- Extension activities to popularize the Semen Bank for small ruminants established under Sujala-III project and Field transfer of cryo-preserved semen of small ruminant semen station
- Continuation of village level LRI trainings and LRI card distribution in project districts, where LRI activity is carried out.

Financial year wise fund allocation (Rs. in lakhs)						Total
Jan 2020 –Mar. 2020 (3 months)	April 2020 –Mar 2021	April 2021 –Mar 2022	April 2022 –Mar 2023	April 2023 –Mar 2024	April 2024 –Dec 2024 (9 months)	Total
365.44	1468.21	501.83	618.16	620.66	463.52	4037.22

The Exit Strategy of the project is to ensure continuous updation of the database for the sustainability of Digital Library, Land Resource Portal, Decision Support System, Mobile applications etc. and maintenance of the dedicated labs and equipment in the LRI partner institutions, established under the Sujala-III project, has been prepared for post project period for 5 years from January 2020 to December 2024 for Rs.4037.82 lakhs and approved in the 14<sup>th</sup> Project Empowered Committee (PEC) held on 07.11.2019 under the Chairmanship of Additional Chief Secretary and Development Commissioner, Govt. of Karnataka.

To ensure sustainability of community based interventions and community based organisations, the community assets will be handed over to gram panchayat and post-project period, the Executive committee of watershed will continue to work as sub-committee of the gram panchayat. The contribution received from the community while executing watershed interventions under the project is also transferred to the gram panchayat for maintenance of the community assets created under the project.

In order to ensure the sustainability of the institutional arrangements made under the project by partnering with various scientific organisations such as Agriculture, Horticultural Universities, NBSS&LUP and IISc, Government of Karnataka has agreed to provide financial resources to continue minimal staff, so that the partner institutions can sustain the infrastructure created under the project and continue to provide required information to the line departments including timely updation of information to Digital library, Portal, Decision Support System and mobile applications created under Sujala-III project.

  
(PRABHASH CHANDRA RAY)

Commissioner,  
Watershed Development Department  
Bangalore.



## Visit of Pre-Implementation Completion Report (PICR) Mission

A pre-Implementation Completion Report (PICR) Mission from World Bank visited Sujala-III project from 14 -18<sup>th</sup> October 2019 to lay the ground work for the Implementation Completion and Results Report (ICRR). The team was led by Dr. Grant Milne, Task team leader and Ms. Ayala Peled Ben Ari, the lead consultant for preparing ICR report. The other team members include Mr. Ranjan Samanaray (Co-Task Team Leader), Ms. Banu Setlur (Senior Environmental Specialist), Mr. S.C Rajshekar (Agriculture consultant), Mr. Karuna Krishnaswamy (Economist and evaluation consultant). The mission also reviewed the borrower's completion report and results framework of the project and provided its feedback.

The mission also conducted field visits to Tumkuru, Davanagere and Bellary districts on 16<sup>th</sup> and 17<sup>th</sup> October



2019. During this field visit, the team inspected various watershed development interventions in the saturation watersheds such as soil and water conservation activities, drainage line treatments, forest plantation, Agro-horticulture, Livestock promotion activities and horticulture demonstration activities including the Farmers producers Organisation etc.

## Implementation Completion Report (ICR) Mission of World Bank visit to Sujala-III Project

A World Bank (WB) team visited Karnataka from December 2-6, 2019 for an Implementation Completion and Results (ICR) mission of the Karnataka Watershed Development Project-II (KWDP-II). The primary mission objectives were to conduct a broader assessment of project performance, including safeguards, procurement and fiduciary activities in addition to ensuring that the team has all necessary information to complete a first draft of the ICR report (ICRR). The mission included presentations on the project status, and follow-up meetings with implementing partners and senior officials. Key mission findings and follow-on

actions were discussed at the formal wrap-up meeting on December 6, 2019 with the Additional Chief Secretary and Development Commissioner as the chair.



The mission was led by Grant Milne (Task Team Leader), Jackie Julian (Co-Task Team Leader) Ranjan Samantaray (Co-Task Team Leader); Ayala Peled-Ben Ari (Lead ICR Consultant); Suryanarayan Satish (Sr. Social Development Specialist); Anupam Joshi (Sr. Environmental Specialist); Banu Setlur (Sr. Environmental Specialist) Joy Agene (Natural Resources Management and Geospatial Specialist; Priti Jain (Senior Procurement Consultant); Anantha Karur (Financial Management Analyst); Karuna Krishnaswamy (Economist Consultant).

After the visit the team expressed its satisfaction about the implementation of the project and The country Director and communicated the Aid memoire to chief secretary GoK vide its letter dated 2<sup>nd</sup> Jan 2020, "The Project had a very slow start, due to a different design than past watershed operations, with a stronger focus on technical support and innovation, challenges in bringing on board 14 scientific and technical partners and defining in more detail the shape of the Land Resource Inventory System to be linked to a digital library and web portal. Over the past three years however, the project has turned around and will be closing with all targets in the revised Results Frame work achieved or exceeded, and the project well-positioned as an incubator for innovation that will influence watershed management, precision agriculture, and climate resiliency not only throughout India, but in other regions."

### Weather Information Service by KSNDMC

One of the Project Partners of SUJALA-3, the Karnataka State Natural Disaster Monitoring Centre, (KSNDMC) Bengaluru is providing weather related information, forecast and advisory service free of charge to enable the farmers to plan their agricultural activities and minimise crop loss under its VARUNA MITRA programme. Farmers can contact : 24x7 Interactive, Help Desk : 92433 45433, 080-22745232 / 22745234

Source: [www.ksndmc.org](http://www.ksndmc.org)

### 14<sup>th</sup> Project Empowered Committee (PEC) Meeting

14<sup>th</sup> Project Empowered Committee (PEC) Meeting was held on 7<sup>th</sup> November 2019 under the Chairmanship of Smt. Vandita Sharma IAS, Additional Chief Secretary and Development Commissioner to Government, GoK. Major agenda points discussed during the meeting were review of physical and financial progress, revision of



approved DPRs of saturation projects, project exit strategy, utilisation of unspent balance funds for post project period upto March 2020, revision of MoU of UAS, Bangalore, revision and extension of KRSAC MoU, extension of M/S Ceinesys contract, progress of design, development and establishment of DL, portal and DSS, Issues with ICRIASAT and Bangalore University, extension of contract period with NSIL, technical assistance to FPOs, Pre-ICR mission visit from World Bank and proposed South-South Knowledge Exchange (SSKE) on Climate Smart Agriculture Etc. After the detailed deliberations, the committee took note of all the proposed subjects and accorded approval of exit strategy among others and directed to expedite the progress of the project.

### Workshop by IIS&WC, Bellary

A State level workshop on “Science based watershed planning and implementation-Learning experiences



and way forward” was organised by ICAR-IIS&WC Institute Bellary on 23<sup>rd</sup> December 2019 at NBSS&LUP, Bangalore. The workshop was inaugurated by the Executive Director (Sujala-III) and Director, WDD. LRI, Hydrology and M&E project partners participated in the

workshop along with watershed Department officials. During the workshop the project partners, Dept. officials and M&E agencies shared their experiences, learning's and provided suggestions for the way forward.

### Release of Atlases and Compendiums of Sujala-III

University of Agricultural Science, Bangalore had organized a program on 30<sup>th</sup> December 2019 for the release of LRI, Hydrology Atlases and Compendiums (Status of Organic Carbon and Micronutrients); Research papers and abstracts presented and published; Case studies prepared during the project period. The program was organized in the seminar hall of SS & AC, CoA, GKVK, UAS, Bangalore and the program was presided by Dr. S. Rajendra Prasad, Vice Chancellor



of UAS, Bangalore, Sri Prabhash Chandra Ray, Project Director Sujala-III project and Commissioner, Watershed Development Department, Dr. Padmaya Naik, Executive Director and other officers from UAS Bangalore and Watershed Development Department.

Vice Chancellor gave inaugural address and spoke on importance of dry land farming and the role of Sujala-III project in generating the data. Dr. Chikkaramappa, Coordinator of Sujala-III project, presented the report in detail about the project. Project Director (Sujala-III) and Commissioner, WDD spoke about the contribution of University in successful completion of project deliverables and how to take it forward to ensure the sustainability of the infrastructure created by the project and to make effective use of it in providing useful information to line departments, researchers and farming community.

### Field Day on Mango and Guava Crops

Sujala-III Project had organized a unique field day on Mango and Guava crops on December 19, 2019. The field day was organized on the technological aspects of the crops at the beginning phase of the crops, so that the farmers take the advantage of the technological interventions at the beginning of the crop



periods. December is the month when mango crop starts flowering and this is the period to give 'Bahar' treatment to Guava crop for better and quality yield. The field day was organized in the Mango and Guava field of Shri Basavaraja, Heggapura village, Lingasuguru taluk, Raichur.

More than sixty-five farmers from Heggapura, Thodaki and Kumarakheda Micro Watershed areas participated



in the field day and got benefitted. Dr. Kusuma, Assistant Horticulture Officer, Lingasuguru, Dr. R Shekar, Head and Dr. Arvind Rathod, Subject Specialist, Department of Extension, Lingasuguru, UAS, Raichur were the resource persons. The importance of soil, water and leaf analysis and the role of nutrients and micro nutrients, selection varieties, soil and water conservation interventions, integrated water management with micro irrigation, use of organic mulch, integrated pest management etc. were explained to the farmers. A farmer-resource person interaction meeting was arranged for the benefit of the farmers.

### REWARD – World Bank Team Visit to Sujala-III

A team from World Bank visited Sujala-III project of Watershed Development for preparatory work on proposed World Bank assisted New multi-State watershed project namely “Rejuvenating Watersheds



for Climate Resilience through Innovative Development (REWARD)” The team visited from 21-22<sup>nd</sup> November 2019. The team comprised of Ms. Preeti Kumar, Task Team Leader (REWARD), Robin B Verma (Social Safeguard consultant), Robin K Thakur (Procurement

Specialist) Rajshekhar (Agriculture consultant), JVR Murthy (Consultant), Lina Winyi (Consultant), Kasuri Basu (Consultant), Dr. Natarajan (Consultant). During the visit, team had discussions with the officials of WDD, project partners, Secretary, Dept. of Agriculture, GoK and Chief Secretary, Government of Karnataka. During his concluding remarks Chief Secretary, Gok asked the Department of Agriculture to propose to Finance Department, GoK for participation of the State in the proposed REWARD project and expressed that it is required to upscale the land resource inventory to other regions of the State.

The team again visited the State from 11-13<sup>th</sup> December 2019. During this visit, team collected information regarding various schemes implemented in the State and interacted with other line departments such as Horticulture, Ground water, KSNMDC, IISc etc. The team also visited Tumkuru district to study Sujala-III and PMKSY watershed projects and to interact with field functionaries and the community based organisations.

### Review and Scale up Workshop to CEOs and BoDs of FPOs

With the objective of giving the status of an enterprise to agriculture sector and strengthening the economic status of the farmers with sustainable agriculture



development and livelihood security, the Govt. of India brought the Farmer Producers Companies under the purview of Indian Companies Act or Companies Amendment Act 2013. In order to organize the small and marginal landholding farmers on a common platform and to provide suitable solutions to the challenges being faced by the farmers growing horticultural crops, 11 FPOs established under the Sujala-III. In order to assist the BODs and CEOs of the FPOs and develop expertise by capacity building in running the FPOs as a company all the FPOs were provided incubation and hand holding services. As a part of this, IFHD had organized a two-day review cum scale-up workshop for the CEOs and

Continued page>>7

**Mobile Vegetable and Fruit Vending Vans of the FPOs gaining popularity-A success story from Sujala-III**

With the basic objective of providing remunerative prices to the vegetable and fruit growers, avoiding the middle men, nutritional security to rural population by making available the fresh vegetables at their door steps and with a intension of providing new business plan to the Horticulture Farmer Producers Organization(HFPO)s, so that the FPOs get regular business 'Mobile Vegetables and Fruits Vending Vans'



have been provided to all the 11 HFPOs established under the KWDP-II, Sujala-III(Horticulture Component). The HFPOs would run these vending vans in their areas of operations. Apart from this the vegetables growing farmers can sell their vegetables/fruits to the respective HFPOs and get remunerative price for their produce. The mobile vending van has been designed and developed by the IIHR, Bengaluru.

These mobile vending vans were run on an experimental basis at Davanagere, Jagalur, Gadag, Koppal, Raichur, Lingasugur, Humanbad, Tumakuru etc by the respective FPOs with the assistance and support of the Department of Horticulture under the World Bank aided KWDP-II, Sujala-III project which has caught the attention of consumers who had rushed to the spots for purchase of vegetables and fruits in fresh form. The consumers expressed their happiness over this experiment and desired that these vans run in streets and corners of their villages, towns and cities. They also expressed that the rates were more competitive as compared to the market price and the produce is fresher. The vending vans have been designed by Indian Institute of Horticulture Research (IIHR) at a cost of Rs. 12 lakh / per vending van and it has the following features.

- The van contains evaporative cooling system with timer to manage temperature and Relative Humidity inside the van.

- Stainless steel structure is provided to maintain hygiene and easy maintenance.
- The Bio energy - solar power of 600 W is used for electrical gadgets fitted in the van, it saves energy and environment.
- The van is fitted with electronic weighing balance, TV for produce price display, audio system for announcement, GPS for tracking the movement.
- Five numbers of High humidity storage boxes for storing leafy vegetables have been integrated.
- The capacity of the vending van is 250 – 300 kg of vegetables and fruits.

It is expected that all the 11 FPOs would be plying these vans in their respective areas of operation to facilitate the consumers at their door steps with fresh vegetables and fruits. Needless to say, this facility would motivate the vegetables and fruits growers to sell their fresh produce to the FPOs and get more profits.





### Sujala-III Partners Progress Review meeting

Partners progress review meeting was held on 21<sup>st</sup> October & 19<sup>th</sup> December 2019 by Project Director, Sujala-III and Commissioner WDD. The physical and financial progress of various components against the agreed targets were reviewed and future plan of action on dissemination activities were discussed.

#### LRI & Hydrology Progress upto 31<sup>st</sup> December 2019

Sl. No	Partners Name	LRI Atlas Submission			Hydrology Atlas Submission		
		Target	Achievement	%	Target	Achievement	%
01	NBSS & LUP	604	604	100	100	100	100
02	UAS-Bangalore	423	423	100	76	76	100
03	UAS-Dharwad	633	633	100	109	109	100
04	UAS-Raichur	430	430	100	60	60	100
05	UHS- Bagalkot	229	229	100	47	47	100
06	UAHS-Shimoga	215	215	100	36	36	100
<b>Total</b>		<b>2534</b>	<b>2534</b>	<b>100</b>	<b>428</b>	<b>428</b>	<b>100</b>



### Sujala-III Districts Review meeting

Project Director (Sujala-III) and Commissioner, WDD reviewed the progress of project districts on 19<sup>th</sup> December 2019. The physical and financial progress of saturation watersheds, LRI trainings, IGA trainings, etc were reviewed and necessary directions provided to improve the progress.

#### Progress of Village Level LRI Trainings as on 31<sup>st</sup> December 2019

Sl. No	District	Number of LRI Trainings			LRI Cards Status	
		Target	Achievement	%	Printed	Distributed
01	Bidar	234	342	146	54403	18184
02	Chamarajanagar	163	128	79	24304	17648
03	Chikmagalur	129	149	116	70635	35227
04	Davanagere	112	138	123	65638	53348
05	Ballari	18	64	356	3372	2210
06	Gadag	299	239	80	68757	34240
07	Kalburgi	232	278	120	52510	49495
08	Koppala	269	227	84	64457	54740
09	Raichur	214	215	100	29928	18173
10	Tumkur	260	212	82	68701	46749
11	Vijayapura	325	185	57	26979	14983
12	Yadgir	279	202	72	61978	31276
<b>Total</b>		<b>2534</b>	<b>2379</b>	<b>94</b>	<b>591662</b>	<b>376273</b>

### District wise Financial Achievement of pilot Watershed Development projects (Rs. in Lakhs) till Dec 2019

Sl. No	District	No of MWS	DPR Amount	Progress	%
01	Bidar	10	1397.07	1342.79	96
02	Chamarajanagar	11	1252.05	1218.24	97
03	Chikmagalur	2	131.18	135.94	104
04	Davanagere (Now Bellary)	7	960.00	965.94	101
05	Gadag	8	852.35	836.04	98
06	Kalburgi	8	1575.45	1563.56	99
07	Koppal	10	1100.00	1082.24	98
08	Raichur	2	436.27	431.91	99
09	Tumkur	13	1705.60	1662.93	98
10	Vijayapura	8	1109.50	1090.90	98
11	Yadgir	10	943.36	794.75	84
<b>Total</b>		<b>89</b>	<b>11462.84</b>	<b>11125.24</b>	<b>97</b>



### Component wise Financial Progress till December 2019 (Rs. in Crores)

Sl. No	Component	Target	Achievement			
			till 2018-19	for 2019-20	Cumulative	%
01	Improved Program Integration in Rainfed Areas	122.44	87.96	18.82	106.78	87
02	Research, Development and Innovation	144.92	117.82	25.56	143.38	99
03	Institutional Strengthening	13.94	7.35	1.61	8.96	64
04	Horticulture	102.74	88.46	6.18	94.64	92
05	Project Management and Coordination	28.55	16.71	5.31	22.02	77
<b>Total</b>		<b>412.59</b>	<b>318.30</b>	<b>57.49</b>	<b>375.79</b>	<b>91</b>

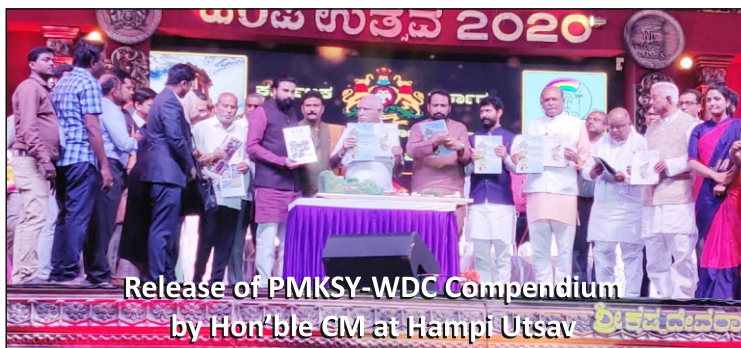
The Project cumulative disbursement till 31<sup>st</sup> December 2019 has reached **91.90%** the Project has another 4 months to complete all payments

From page <<5

Board of Directors (BoDs) of all the FPOs on Dec.19-20, 2019 at UTC, Bengaluru. Business performance of the FPOs, success stories and lessons learnt, shortcomings and limitations were reviewed and consolidated and leveraged to address the key challenges and facilitate the FPOs to develop their own roadmaps and strategies towards sustainability of the FPOs.



**Photo Gallery**



**Release of PMKSY-WDC Compendium  
by Hon'ble CM at Hampi Utsav**



**Hon'ble Agriculture Minister visit to watershed Stals at  
Koppal**



**UAS- Bangalore team of Sujala-III with project Director**



**UAS-Dharwad team of Sujala-III Project**



**UAHS-Shimoga team of Sujala-III Project**



**NBSS & LUP team of Sujala-III Project**

**WDD Mission:**

"To strive towards sustainable agriculture through integrated watershed management approach by conserving natural resources such as soil, water & bio-diversity and adopting improved farm practices that are evolved through participatory process involving both scientific and indigenous knowledge system to empower the rural people to enhance their Livelihood".

**About Sujala-III Project & Newsletter:**

"Su" is Good & "Jala" is water in vernacular language. An unique World Bank aided project (Credit No 5087-IN) Which provides scientific input in planning & execution for ongoing Prime Minister Krishi Sinchai Yojana (PMKSY) [erstwhile Integrated Watershed Management Programme (IWMP)] projects, during the period (2013-2019) in the selected 11 districts with the intervention of watershed development, horticulture & livelihood. SUJALA Newsletter is a virtual communication medium among the stakeholders of Karnataka Watershed Development Project-II (SUJALA-III). Watershed Development Department (WDD) invites contributions in the form of news & events, success stories, progress reports & letters to the editor etc. The material should be short, crisp & concise along with good JPEG photographs to be sent to [sujala3@gmail.com](mailto:sujala3@gmail.com). Right to edit rests with the editors. The views expressed in this Newsletter are of those individuals only & not of WDD.

**Sujala-III Newsletter** brought out by

**Padmaya Naik**

Executive Director (I/C)  
Sujala-III

Documentation Cell  
Watershed Development Department  
Government of Karnataka  
Bengaluru-560009  
Tel:080-22122853  
e-mail:[sujala3@gmail.com](mailto:sujala3@gmail.com)  
Website:[www.watershed.kar.nic.in](http://www.watershed.kar.nic.in)

*Editor-in-Chief* : **Prabhash Chandra Ray**, IFS  
Project Director (Sujala-III) and  
Commissioner, WDD

*Editor* : **Prakash Kumar .M**  
Documentation & IGA specialist

*Design* : **Ramesh Agrahara**  
Graphic Designer