

Press release April 26, 2023

The NGO Water For Karakalpakstan has ordered 2400 [ORIAZ Solar-Dripper](#) for Uzbekistan families



[French version communiqué.](#)



This region of Central Asia located near the Aral Sea is suffering the worst droughts for several years. After decades of unsuitable industrial agriculture, the Aral Sea has dried up 90 % and dropped 14 m down leading to soil salinization and even more extreme temperatures.

The director of the NGO [Water for Karakalpakstan](#), mr Nik Chantel was looking for a sturdy, ultra efficient drip irrigation system to distribute locally to families and allow melon or vegetable crops to be grown with the minimum of water. They found ORIAZ in France through research on [drip irrigation efficiency](#). The Solar-Dripper can reach an unrivaled level of up to 99.4%.

Thanks to its patented bioclimatic regulator, the ORIAZ Solar-Dripper can provide a watering rate of 10 to 1000 times slower than conventional drippers. In addition, watering is **naturally synchronized** with evapotranspiration (ET). This proven natural synchronism with plants needs improves growth by avoiding soil saturation and reducing percolation losses.

Finally, the special ORIAZ regulator is 10 to 100 times more clogging resistant. Biofilms, salts and particles of 2 mm can pass trough. The Solar-Dripper can thus use river water, gray water or rainwater directly without filtration or electricity needs. Robust and inexpensive, it has a lifespan of 5 to 20 years.

2400 ORIAZ drippers already arrived in Uzbekistan but the needs are huge. You can help to send more Solar-Dripper with this [online donation link](#).

The offices of the NGO Water for Karakalpakstan are open for three weeks in Uzbekistan to distribute this solution.

The Embassy of Uzbekistan is very receptive to this proven solution.



Aral sea

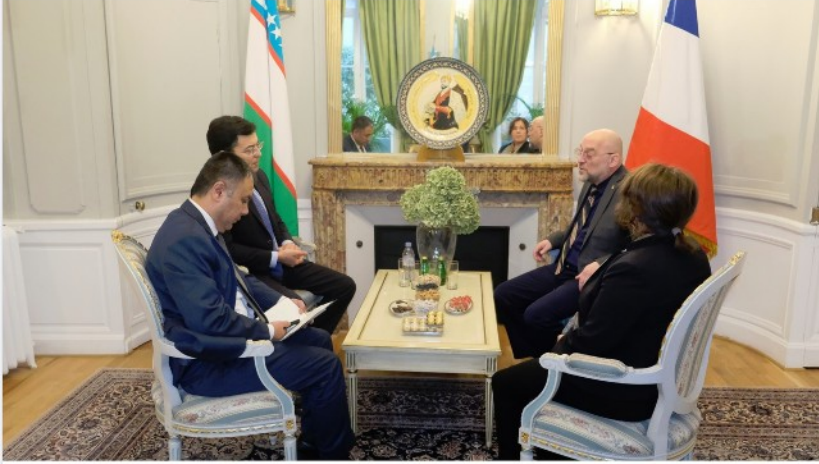


Ambassade d'Ouzbekistan en France · Suivre
23 février ·

🇺🇵 2023 yil 22 fevral kuni #O'zbekiston Respublikasining Fransiya va Portugalyadagi Elchisi S. Rustambaev va #Fransiyada tashkil etilgan "Water for Karakalpakstan" #Assotsiatsiyasi vakillari Nik va Natasha #Shantel o'rtasida uchrashuv tashkil etildi.

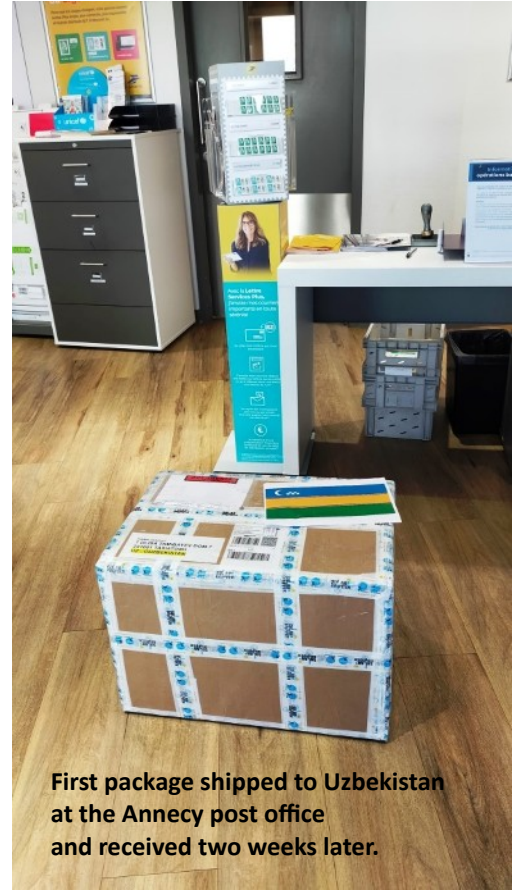
🇫🇷 Le 22 février 2023 l'Ambassadeur d'#Ouzbékistan en France et au Portugal SEM Sardor #RUSTAMBAEV a reçu les représentants de l'#Association "Water for Karakalpakstan" Monsieur et Madame Nik et Natasha #CHANTEL pour discuter la perspective de coopération.

🇺🇵 On February 22, 2023 Ambassador of #Uzbekistan in France and Portugal H.E. Sardor #Rustambaev received the representatives of the #Association "Water for Karakalpakstan" Mr. and Mrs. Nik and Natasha #Chantel to discuss the perspectives of bilateral cooperation.



Vous et 11 autres personnes · 2 partages

J'aime · Commenter · Partager



First package shipped to Uzbekistan at the Annecy post office and received two weeks later.



The offices of the NGO Water for Karakalpakstan have just opened in Uzbekistan to distribute the ORIAZ Solar-Dripper

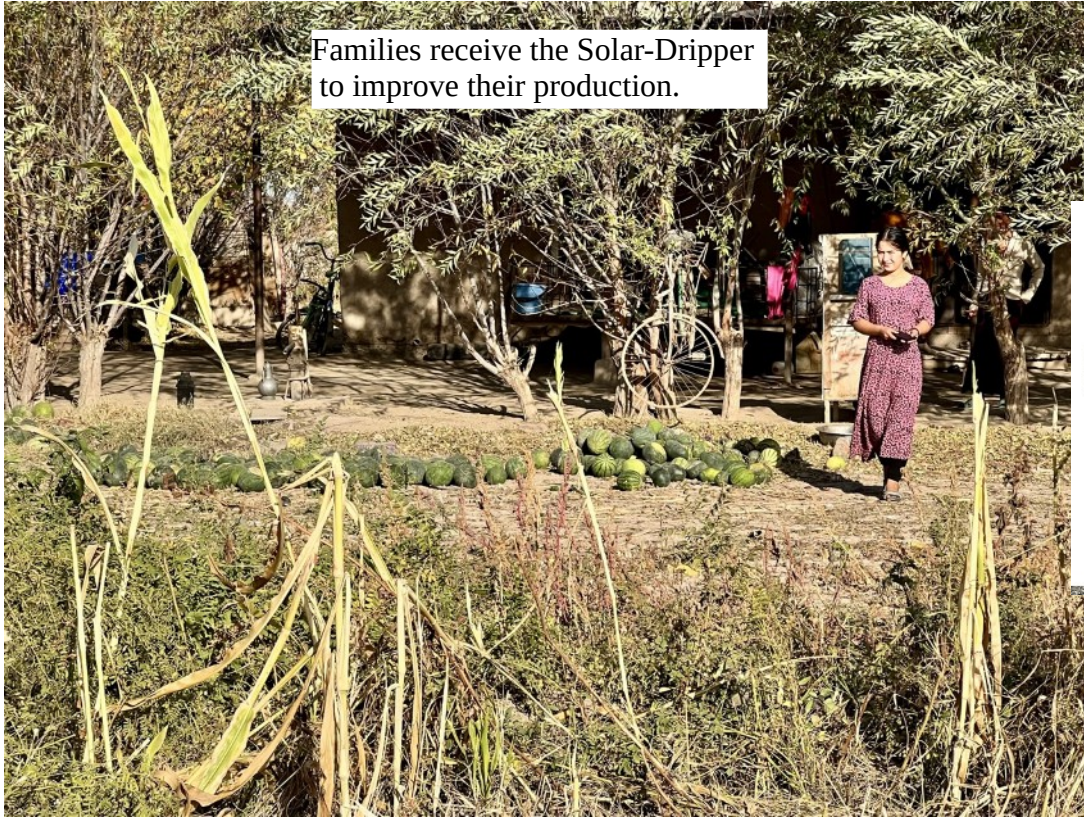
Online donations



Premier colis de Goutteurs Solaire d'Annecy vers l'Ouzbékistan

First box of Solar-Dripper from Annecy to Uzbekistan





Families receive the Solar-Dripper to improve their production.



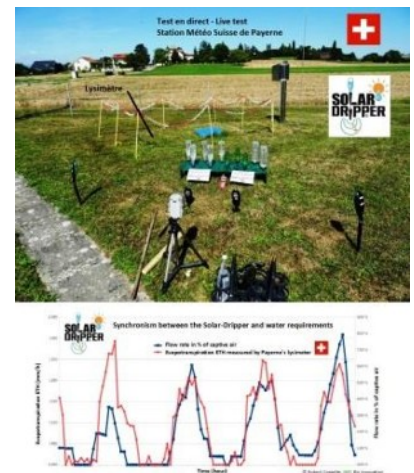
The ORIAZ Solar-Dripper invented by engineer Robert Cossette in Annecy received the sustainable development award locally in 2003, [national eco trophies in 2009](#), and the SolarImpulse foundation efficient solution label in 2019. The Solar-Dripper is recommended by the Rich Earth Institute (USA).



Robert Cossette's experiences have been the subject of several reports. For example, the ET tests in Annecy and Switzerland, the use of urine as a fertilizer and the planting of Corsican Laricio pines.

8 Mont Blanc on the ET tests carried out in Switzerland (in french):

FR3 report in 2019 on the cultivation of tomatoes fertilized with urine and eaten in Sweden during the World Water Week.



TV Report on the Corsican Laricio pine plantation



Robert Cossette was a speaker at the Rich Earth Summit to explain how to apply Urine as a free fertilizer with the Solar-Dripper.

He was also invited as an eco-entrepreneur expert speaker at the [Susana 2021](#) meeting.

The most efficient drip irrigation system



The ORIAZ Solar-Dripper distributes water only to the heart of the roots.

It is 10 to 100 times more clogging tolerant than conventional drippers.

Its unique bioclimatic regulator lets particles larger than 2 mm and biofilms pass.

You can use rainwater, river water, any type of fertilizer without filtration.

There are no leaky tubing or quantity discrepancies from one plant to the other.

ORIAZ is designed to last 10 years.

Water flow is not caused by inlet pressure but by temperature cycles naturally generated by the sun.

The rise in temperature causes the trapped air to expand and the water to exit the bioclimatic regulator with an average flow rate about 10 to 1000 times slower than conventional drippers.

Classic drippers have flow rates of 500 ml to 8 liters per hour while the ORIAZ Solar-Dripper provides an average flows of 0.4 ml to 400 ml / hour.

This much slower fragmented watering improves soil oxygenation by avoiding saturation. It also reduces percolation losses.

We measured evaporation loss at only 0.55% through the cone-stake air gap.

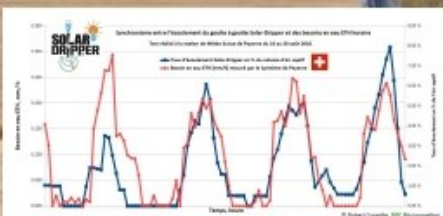
ORIAZ Regulator stake



ORIAZ is the only drip system to naturally adapt watering flow with the plant needs.

This unique ability has been demonstrated experimentally in Ancey and in Switzerland.

Solar-Dripper Flow in blue follows Evaporation in red.



Oxygenation

Synchronized Hyper-Slow flow 0.4 to 400 ml/h

You control the average flow by using a bottle of a size proportionate to the needs of your plant.

For example, an orchid will be watered for a month with a 330 ml bottle for a micro flow.

A more gourmand tomato plant will be watered with a 1 or 2 liters bottle.

The frequency of fillings and the rate of filling make it possible to adjust average watering with the development cycle of your plant.

Up to 99.4% measured efficiency

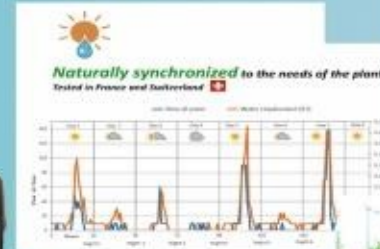
The fact sheets have been translated into 4 local languages by Water for Karakalpakstan.

Water for Karakalpakstan

Нима учун Қуёш-томизғични танлаш керак? Solar Dripper-Қуёш-томизғич ҳаво ҳароратининг ўзгаришини оқим двигатели сифатида ишлатади.

Патентли фаол ишлайдиган регулятор эса, тиқилиб қолишининг олдини олади ва сув оқими ўсимликнинг эҳтиёжларига мос келишини таъминлайди.

Суғориш ва ўғитлаш одатий ер усти суғоришдан кўра яхшироқ назорат қилинади. Бу нарса бегона ўтлар чиқишини камайтиради ва намнинг тупроқдан буғланиб кетишининг олдини олади.



0,3 мл/соатлик ўта секин тезлик гулларни мукамал суғориши мумкин, аммо у бўйи 4 метрлик помидор бутаси учун 300 мл/соатни ҳам таъминлайди.

Ўрнатишингизга кўра давомийлиги 1 кундан 60 кунгача.



www.Karakalpakstan.net



Қуёш-томизғичнинг оқимини қандай мослаштириш керак?

Энг секин тезлик соатига 0,3 мл.дан бошлаб, соатига 300 мл.гача суғора олади.

Ўртача: ташқарида бир ҳафта, ичкарида бир ой.

Таъсирига кўра синов мuddати 1 кундан 60 кунгача.



Секинроқ оқим учун 90% тўлдириш

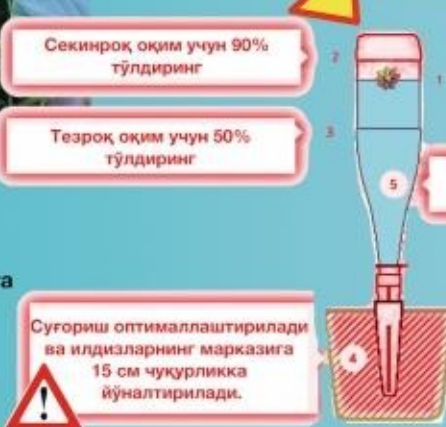
Тезроқ оқим учун 50% тўлдириш

Нормал ишлатиш учун 75% тўлдириш

Ўғитларни суюлтиришингиз ёки органик ўғитлар кўшинингиз мумкин

Суғориш оптималлаштирилади ва илдишларнинг марказига 15 см чуқурликка йўналтирилади.

Баклажканинг катталигини 200 мл.дан 2 литргача танланг: баклажка қанча катта бўлса, шунча кўп суғорилади.



Тўлдиришда бошланғич тезликни танланг: баклажка ичида ҳаво қанча кўп бўлса, шунча тезроқ суғориш мумкин.

Бу Қуёш-томизғичи иқлим сезувчанлигининг ушбу одатий кўрсаткичи эгри чизигига мос келади.

Нормал тўлдириш: 75% калибрланган баклажканинг кўк нуқтасигача.

Давомийлигини ошириш учун 90% гача тўлдириш.

Оқим тезлигини ошириш учун 50% гача тўлдириш.

Оқимнинг давомийлиги қуёш таъсирига боғлиқ.

Бу таъсир боғда тўлиқ бўлиб, бино ичида деразаларнинг масофасига кўра аста-секин камая боради. Шу сабабли, боғда баклажкардаги сув бир-неча кунда бўшаса, ичкарида, қуёш таъсири кам бўлган жойда бир ойга етиши мумкин.

Иссиқ ҳавода боғ кўпроқ суғорилади.

Булутли ҳавода ва қишда суғориш табиий равишда мавсум эҳтиёжига кўра камаяди ва бир баклажка сув 60 кунга етиши мумкин.

The ORIAZ Solar Dripper has been tested in France, Switzerland, Austria, Canada, USA, Africa, Madagascar and Mexico in extreme drought situations. Tomatoes are sweeter using less water.

Consumers can order ORIAZ by this link (20 € for 6 Solar-Drippers) [from our inline web site.](#)

Retailers and distributors can contact us to have the ORIAZ available in store.
NGOs can get this essential watering product at the humanitarian conditions.
ORIAZ Solar-Dripper can be use for home gardening or tree plantation.

Journalists are welcome to visit us in Annecy or to call us for a ZOOM meeting.

Contact : Robert Cossette +33 4 50 66 55 89 +33 6 76 94 27 97



Oriaz Environnement
4 rue Saint-François de Sales
74000 Annecy, France

