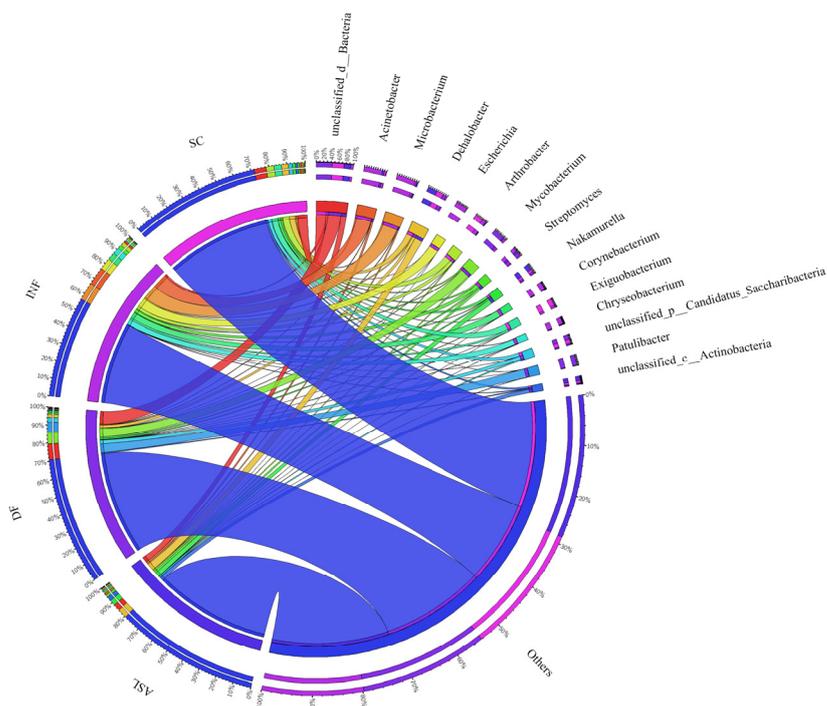
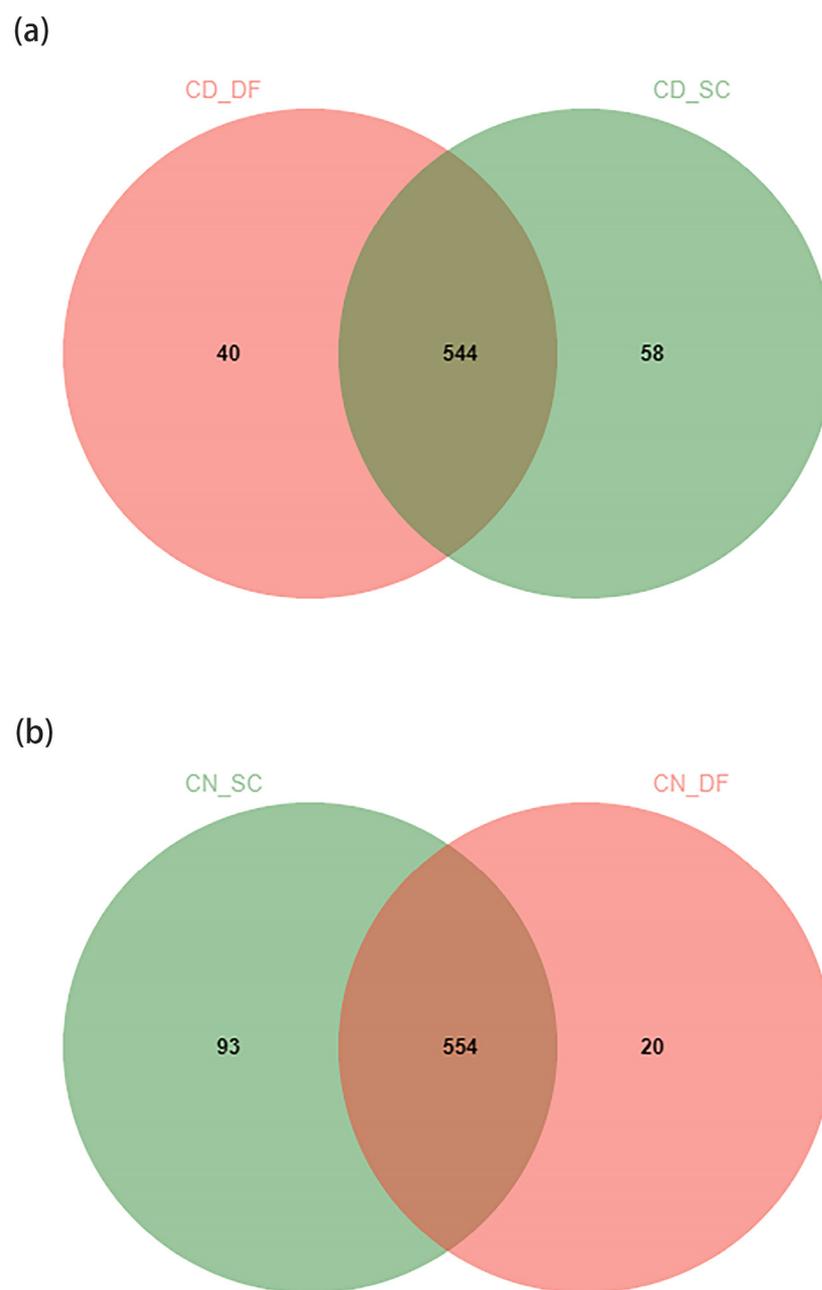


**Figure S1.** Schematic flow diagram of the investigated WWTPs with same process. The sampling points were noted as red prints.



**Figure S2.** Circular representation of bacterial community in INF, ASL, SC and DF at genus level from all the samples. The outmost circles names of sample and microbial composition. The lines inside the circle link the genus to the sample and the line stand for the relative abundance of different genera in the samples.



**Figure S3.** Distribution of ARGs subtypes in SC and DF at the two WWTPs.

**Table S1.** Information of accession ID.

Sample Name	Accession Number
INF1	SRR16481189
ASL1	SRR16481188
SC1	SRR16481187
DF1	SRR16481186
INF2	SRR16481185
ASL2	SRR16481184
SC2	SRR16481183
DF2	SRR16481182

**Table S2.** ARGs removed from CN and CD plants through D-type filters.

ARGs Name	Description	Class
<i>mphB</i>	macrolide resistance gene; antibiotic inactivation enzyme	AR
<i>tet38</i>	efflux pump conferring antibiotic resistance	AR
<i>L1 beta-lactamase</i>	antibiotic inactivation enzyme; beta-lactam resistance gene	AR
<i>evgA</i>	efflux pump conferring antibiotic resistance; gene modulating antibiotic efflux	AR
<i>ErmS</i>	antibiotic target modifying enzyme; lincosamide resistance gene; macrolide resistance gene; streptogramin resistance gene	AT; ABS
<i>OXA-37</i>	antibiotic inactivation enzyme; beta-lactam resistance gene	AR
<i>OXA-119</i>	antibiotic inactivation enzyme; beta-lactam resistance gene	AR
<i>AAC(6')-Iad</i>	antibiotic inactivation enzyme; aminoglycoside resistance gene	AR
<i>aadA13</i>	antibiotic inactivation enzyme; aminoglycoside resistance gene	AR
<i>arr-2</i>	rifampin resistance gene; antibiotic inactivation enzyme	AR
<i>vanSE</i>	glycopeptide resistance gene; gene conferring antibiotic resistance via molecular bypass; antibiotic resistance gene cluster, cassette, or operon	AR
<i>dfrB3</i>	antibiotic target replacement protein; trimethoprim resistance gene	AR; AT
<i>PEDO-1</i>	antibiotic inactivation enzyme; beta-lactam resistance gene	AR
<i>VanXI</i>	glycopeptide resistance gene; gene conferring antibiotic resistance via molecular bypass; antibiotic resistance gene cluster, cassette, or operon	AR
<i>leuO</i>	sulfonamide resistance gene; gene modulating antibiotic efflux	AR